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This document was prepared in consultation with the Pennsylvania Department of Environmental Protection. Recommendations and observations are provided to inform potential strategies for the Pennsylvania Climate Action Plan and are intended to be updated, amended, or appended with ongoing community dialogue. Time, research, and evolving local conditions could result in alternative recommendations based on new information.

We would like to express our appreciation to the many community members and agency staff that participated in this work.



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All components of the *Climate Change Strategies for environmental justice Communities* including all text, graphic design, photography and illustrations unless noted otherwise were prepared by Dominique M. Hawkins, FAIA, LEED AP and Jennifer Wolfe, AICP.

Preservation Design Partnership, LLC  
Philadelphia, Pennsylvania  
[www.pdparchitects.com](http://www.pdparchitects.com)

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## EXECUTIVE SUMMARY

Climate hazards in Pennsylvania include heavy rainfall, flooding, and extreme heat which are already health and economic challenges for people in environmental justice communities. Demographics, social and economic factors, language, health conditions, and limited resource access are a few indicators of environmental justice threats which can cause disproportionate exposure to heat and flood conditions. As part of the Pennsylvania Department of Environmental Protection's climate planning initiatives, the Energy Programs Office conducted outreach to identify needs and strategies that can reduce these impacts specifically for environmental justice communities.

This project included a two-part engagement program: open discussions with stakeholders and online surveys. The seven open discussions facilitated by DEP consultant Preservation Design Partnership, LLC (PDP) were held in April 2023 in coordination with the Energy Programs Office with support from the Office of Environmental Justice. Each discussion session noted in the sidebar, at right, was approximately two hours.

During these sessions, PDP presented a brief introduction to potential climate change strategies from one of eight categories (*refer to sidebar*), which was selected from the 2021 *Pennsylvania Climate Action Plan* greenhouse gas emission sectors. After the presentation, participants were asked to share insights about how they are affected by climate change issues and what strategies could help; ranging from individual and community actions, to industry and state actions.

The second engagement piece, the online surveys, were prepared and published on a website and provided to generate feedback on 92 potential strategies. Respondents were asked to evaluate the strategies in terms of their importance, type of assistance needed, leadership, and potential hardships. The strategies were organized in the same eight strategy categories presented in the open discussions. Survey participation was open to any individual in Pennsylvania and was expressly shared across various communities likely to experience environmental justice issues. The data from the online survey reflected in this report was collected between March 9, 2023 and June 1, 2023.

## PROJECT RESULTS

Participation from the open discussion and online survey outreach is captured in this report to provide a framework to guide DEP's Energy Programs Office towards prioritizing existing strategies and identifying additional strategies based on the needs and suggestions of environmental justice communities. Over 200 people participated in the open discussions between in-person and online attendance, and there were a total of 269 strategy surveys completed with 83 distinct Pennsylvania zip codes represented. Common themes identified from the engagement program included recommendations to prioritize equity and accountability across all government agencies and the necessity of increasing the capacity of existing local organizations. Greater transparency, ease of access to funding opportunities, community participation in program planning, and broader communication efforts by DEP are among the various objectives that can be incorporated into climate action strategies for environmental justice communities.

### OPEN DISCUSSION SCHEDULE

- Meadville, April 5th
- Pittsburgh, April 6th
- Scranton, April 10th
- Reading, April 11th
- Harrisburg, April 13th
- Norristown, April 14th
- Philadelphia, April 24th

### CLIMATE CHANGE STRATEGY CATEGORIES

1. Equity
2. Transportation
3. Property/Site
4. Strategic Policies
5. Fuel Sources
6. Public Health
7. Natural Environment
8. Infrastructure

### ADDITIONAL STRATEGY CATEGORIES FROM PARTICIPANTS

- Workforce
- Agriculture

*The table on the following pages represents an overview of the most prominently identified climate change strategies with barriers and potential burdens from the engagement program. Context for the strategies as well as other comments are provided in more detail in Sections 2 and 3; and consolidated in Section 4.*

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

	CLIMATE CHANGE STRATEGIES	BARRIERS AND POTENTIAL BURDENS
EQUITY	Promote comprehensive and accessible programs.	<ul style="list-style-type: none"> <li>• Individuals and community based organizations can be overtaxed with participation requests leading to stakeholder fatigue</li> <li>• Community based organizations need to prioritize their work based on staffing, constituent needs, and budget</li> </ul>
	Provide resources for local organizations already serving vulnerable populations.	
	Publish visual graphics and data in clear language.	
	Evaluate existing policies and programs that are burdensome for low wealth/ transportation-challenged individuals.	
	Create alternate compliance and application requirements for regulatory and incentive programs to reduce barriers.	
	Develop citizen, local government, and organization empowerment toolkits to enable existing entities to develop and direct program improvements.	
	Create ombudsmen, community advocate, or other cooperative efforts to simplify and unify communications between agencies and environmental justice communities.	
	Provide deliverables and tangible benefits to participating citizens and organizations for outreach programs to ease participation commitments.	
TRANSPORTATION	Increase access for individual transportation options and improve multi-use traffic areas and safe sidewalks that incorporate complete streets models.	<ul style="list-style-type: none"> <li>• Costs for individual investment in electric vehicles is prohibitive</li> <li>• Transportation schedule changes can disrupt the reliability of public transit and require broad public notice</li> </ul>
	Connect existing and new public transportation options to activity centers.	
	Evaluate capacity and condition of roads and bridges; post clear signage for weather events that require traffic detours.	
	Expand access to internet service to increase telecommuting and educational opportunities for adults and children.	
	Increase inter-agency cooperation at state levels, and between state and local levels, to incorporate community transportation priorities.	
PROPERTY/SITE	Perform weatherization, energy efficiency upgrades, and seal exterior building elements of homes for owners and tenants.	<ul style="list-style-type: none"> <li>• Costs for property improvements especially renewable energy sources are prohibitive for tenants and homeowners</li> <li>• Older housing stock is prevalent in many areas and may require additional investments prior to energy upgrades</li> <li>• Reluctance to abandon natural gas for electricity because it is perceived as more stable than the power grid during emergencies</li> </ul>
	Improve relationships between landlords and tenants and enforce existing building maintenance policies.	
	Plant trees and native plants.	
	Develop training and educational assistance programs to increase trade professionals.	
	Replace and/or service roofs, windows, doors; improve insulation and air sealing.	
	Fund energy audits and property improvements particularly for rental properties.	
WORKFORCE	Make an inventory of vacant property for potential sites to build green industry and increase employment opportunities.	(None identified)
	Prioritize workforce strategies to address fair labor, energy, housing, salaries, and affordability challenges.	
STRATEGIC POLICIES	Build accountability into all programs and agencies.	<ul style="list-style-type: none"> <li>• Perception that business and industrial entities are not held to the same performance requirements as individuals</li> <li>• Cost-benefit analyses do not incorporate diverse indicators</li> </ul>
	Discourage/limit new development in flood risk areas.	
	Prohibit development in high-risk areas.	
	Include neighborhood and/or community leaders in strategic planning meetings.	
	Increase availability and access to recycling programs.	

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

	PROMINENT CLIMATE CHANGE STRATEGIES	BARRIERS AND POTENTIAL BURDENS
FUEL SOURCES	Mitigate existing sites and sources of air and water pollution.	<ul style="list-style-type: none"> <li>• Potential of financial impacts to property owners and tenants</li> <li>• Producing on-site energy may change a tenant or property owner's energy billing rates from residential to commercial</li> <li>• Nuclear power is perceived as a dangerous source of energy</li> <li>• Perception that an increased use of electricity increases fossil fuel demands</li> </ul>
	Support physical and policy infrastructure for solar energy sources at a community scale.	
	Increase compliance requirements to reduce uncaptured methane emissions.	
	Locate and cap/cover orphaned and abandoned methane wells.	
PUBLIC HEALTH	Perform public health services with the cooperation of existing local resources.	<ul style="list-style-type: none"> <li>• Requesting or receiving services can cause certain mental health issues that may prevent individual participation</li> <li>• Existing community organizations need more support for the services they already provide</li> </ul>
	Include food resource strategies and mental health needs.	
	Protect urban gardens and greenspace from development.	
	Identify plans to address heat and health risks in low-wealth areas.	
	Assess needs for additional child care facilities to accommodate families in emergencies.	
	Deliver resources to communities during boil-water notices.	
	Increase food supply resources through public gardens in needed areas, food pantries, and fresh produce delivery services.	
Remediate hazardous materials at public school facilities and adapt them to function as resource centers.		
AGRICULTURE	Preserve agricultural areas to function as carbon storage.	<ul style="list-style-type: none"> <li>• Outreach efforts and methods need to be established for rural and agricultural properties</li> </ul>
	Improve internet access in rural areas.	
NATURAL ENVIRONMENT	Increase public ecosystem and conservation efforts on public lands.	<ul style="list-style-type: none"> <li>• Political challenges due to limited capacity to affect change on private lands</li> </ul>
	Substantiate how natural environmental strategies will impact micro-local communities.	
	Improve natural water resource conservation to increase local visibility and priority.	
INFRASTRUCTURE	Improve government stormwater management programs through natural strategies.	<ul style="list-style-type: none"> <li>• Cost burden for local infrastructure improvements may fall to taxpayers in already financially burdened communities</li> <li>• Provide transparency regarding public funding of any improvements to ensure that public dollars are not spent on private property</li> </ul>
	Identify assets and systems in flood risk areas.	
	Update aging stormwater infrastructure to include anticipated long-term needs.	
	Actively reduce hard or paved surfaces and transition to natural surfaces.	
	Benchmark environmental design principles with new development as a means to increase public and policymaker support.	



Images courtesy of Pennsylvania Department of Environmental Protection (PA DEP).

# 1 INTRODUCTION

## PROJECT RECOGNITION

*On behalf of the Pennsylvania Department of Environmental Protection, Preservation Design Partnership (PDP) would like to express their gratitude for all the participants who engaged during this outreach process. Thank you for your time and thoughtful remarks.*

*Community hosts in each municipality helped to make the open discussions possible by offering venue space and technical assistance. Please view the individual discussion reports for more details.*

*PDP would also like to thank all of the staff with the DEP Energy Programs Office, Office of Environmental Justice, and Office of Communications for their support and guidance for the duration of the project.*

As part of its climate planning focus, the Pennsylvania Department of Environmental Protection's (DEP) Energy Programs Office is working with communities to identify specific needs and strategies to adapt to and reduce the impacts of climate change.

When fossil fuels are burned to generate electricity, heat buildings, and run engines, the resulting gases—known as greenhouse gases—build up in the atmosphere, causing it to warm. This process intensifies climate change. As the planet gets warmer, extreme weather events called “climate hazards” including storms, floods, and heatwaves will become more common. The greatest climate hazards Pennsylvania currently faces are heavy rainfall and flooding.

Pennsylvanians are already dealing with the impacts of climate change to the state's economy, infrastructure, and public health. These impacts are expected to intensify and disproportionately harm under-resourced communities, particularly those facing environmental justice issues. These issues tend to be more prominent for communities in close proximity to environmental hazards. Furthermore, these areas are often affected by disinvestment in infrastructure to support their populations as a result of historic injustices and systemic challenges.

The Energy Programs Office is incorporating more public engagement into climate action planning. Progress towards that goal requires consideration of the existing challenges and listening to the perspective offered from public outreach with community members. [Pennsylvania DEP Climate Action Strategies for Environmental Justice Communities](#) provides a report on this engagement effort.

## EXISTING FRAMEWORK: 2021 CLIMATE ACTION PLAN

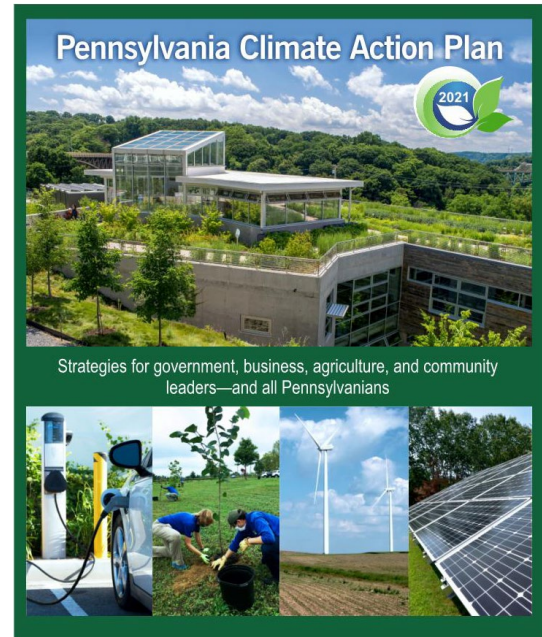
The 2021 *Climate Action Plan* identified outreach to environmental justice communities as a priority for future planning efforts, providing the basis for this public engagement effort. Greenhouse gas reduction and adaptation strategies (refer to table below) prioritized environmental justice and equity and noted that climate change initiatives can improve the quality of life for populations that are already disadvantaged.

### BENEFITS OF GREENHOUSE GAS REDUCTION

- Improving air quality in disproportionately impacted communities
- Reducing energy bills in low-income households
- Increasing transit options
- Providing multiple clean energy options

### BENEFITS OF ADAPTATION STRATEGIES

- Reducing health risks of heat and flooding
- Improving infrastructure to manage heat and flooding



GREENHOUSE GAS EMISSIONS BY SECTOR	REDUCTION STRATEGIES (FROM 2021 CLIMATE ACTION PLAN)
Residential and Commercial Buildings	<ul style="list-style-type: none"> <li>• Support energy efficiency through building codes</li> <li>• Improve residential and commercial energy efficiency (electricity)</li> <li>• Improve residential and commercial energy efficiency (gas)</li> <li>• Incentivize building electrification</li> <li>• Introduce state appliance efficiency standards</li> <li>• Increase distributed on-site solar</li> <li>• Promote and advance C-PACE financing and other tools</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>• Increase fuel efficiency of all light duty vehicles and reduce vehicle miles traveled for single occupancy vehicles</li> <li>• Implement the multi-state medium- and heavy-duty zero-emission vehicle memorandum of understanding</li> <li>• Increase adoption of light-duty electric vehicles</li> </ul>
Industrial	<ul style="list-style-type: none"> <li>• Implement a Low Carbon Fuel Standard</li> </ul>
Fuel Supply	<ul style="list-style-type: none"> <li>• Increase industrial energy efficiency and fuel switching</li> <li>• Increase production and use of biogas/renewable gas</li> <li>• Incentivize and increase use of distributed Combined Heat and Power</li> <li>• Reduce methane emissions across oil and natural gas systems</li> </ul>
Electricity Generation	<ul style="list-style-type: none"> <li>• Maintain nuclear generation at current levels</li> <li>• Create a carbon emissions free grid</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Use programs, tools, and incentives to increase efficiency for agriculture</li> <li>• Provide trainings and tools to implement agricultural best practices</li> </ul>
Land Use/Land Use Change/Forestry	<ul style="list-style-type: none"> <li>• Increase land and forest management for natural sequestration</li> </ul>
Waste	<ul style="list-style-type: none"> <li>• Reduce food waste</li> <li>• Reduce general waste expand beneficial use of waste</li> </ul>



Open discussions were hosted in a variety of spaces and began with the same introduction by DEP and PDP staff.

## OPEN DISCUSSION SCHEDULE

- Meadville, April 5th
- Pittsburgh, April 6th
- Scranton, April 10th
- Reading, April 11th
- Harrisburg, April 13th
- Norristown, April 14th
- Philadelphia, April 24th

Refer to *Open Discussion Reports* (Section 6, page 41) for detailed notes of participant comments.

## STRATEGY CATEGORIES PRESENTED

1. Equity
2. Transportation
3. Property/Site
4. Strategic Policies
5. Fuel Sources
6. Public Health
7. Natural Environment
8. Infrastructure

These strategy categories are based on the greenhouse gas emissions by sector, opposite page, and adaptation methods from the 2021 *Pennsylvania Climate Action Plan* to establish themes that are relatable to the general public. Within these eight categories, 92 total potential strategies were proposed in the online survey to establish their potential to produce meaningful benefits for Pennsylvanians.

## PUBLIC ENGAGEMENT PROGRAM

The purpose of this project was to identify the specific concerns of those affected by environmental justice issues through extensive public engagement. More information about environmental justice issues can be found at DEP's Office of Environmental Justice ([www.dep.pa.gov/publicparticipation/officeofenvironmentaljustice](http://www.dep.pa.gov/publicparticipation/officeofenvironmentaljustice)). The goal was to identify greenhouse gas reduction and adaptation strategies that will best serve communities across the Commonwealth, the form of action, and potential unintended hardships. Following several meetings with the DEP Energy Programs Office, Office of Environmental Justice, Office of Communications, and the Environmental Justice Advisory Board, PDP proposed the following public engagement program:

1. **Open discussions:** The scope of work included seven outreach sessions to be held in areas affected by environmental justice issues. PDP established a format for the open discussions that maintained a consistent framework, provided multiple opportunities for expression, and used language and graphics to convey potential climate and environmental justice issues in a relatable manner.
2. **Online survey:** In order to increase opportunities for participation while gathering comments, PDP developed a website with a public survey component. Prior to launching the online survey, DEP and PDP identified 92 potential strategies to form the basis of survey questions that were derived in part from previously established greenhouse gas reduction and adaptation strategies. The online survey was accessible from the DEP website and a QR code link was provided on all printed materials.

Through both platforms, materials were presented using strategy categories that correspond closely to the industry sectors in the 2021 *Pennsylvania Climate Action Plan* (refer to lower left sidebar). This allowed the participants to first establish how they relate to climate change issues and empowered them to choose where they wanted to focus their comments. Flexibility of free form responses were provided in both cases and the survey was translated into Spanish.

The eight strategy categories were used to organize the open discussion presentation as well as the online survey component. In the open discussion setting, PDP provided an introduction to potential climate change strategies with environmental justice in mind to encourage participants to consider the opportunities and challenges they or their constituents might experience.

Following the presentation, the discussion began with open ended questions used to scale the conversation from individual actions to industry and state actions. At the close of the presentation, the online survey was introduced with the intent to collect responses to a broader range of specific strategies identified by DEP.

In this manner, information that can create barriers was divided into digestible pieces in an additive process. Written materials provided the project description, a visual presentation introduced the climate change categories, and an online survey expanded on the climate change categories with more specific strategy considerations.



Potential strategies need to cover multiple issues ranging in scale from individual properties to industrial companies. Participants provided comments across this range and expressed the need to prioritize equity throughout this effort.

## RECURRING THEMES

- **Equity benchmarks** should be the most important qualifying factor of any undertaking and first component of any public programming.
- **Transportation strategies** should focus on increasing access and safety without relying on personal electric vehicles.
- **Renewable energy upgrades** for private homes should have sufficient funding to include sustainable implementation and necessary additional repairs and weatherization improvements.
- **Expectations** should be placed on industry and state agencies before addressing individual actions.
- **Existing community based organizations** should be empowered with increased capacity to provide assistance to people they already serve.
- **Financial assistance programs** should be prioritized for under-resourced communities in need, reorganized to be user friendly, and supported with application and administration assistance.
- **Climate change information** should be presented in simple terms that is relatable to the general public.

In addition to the eight strategy categories, participants recommended adding two more categories: agriculture and workforce. PDP discerned 48 strategies (versus the 92 total presented in the online survey) that were most frequently expressed during public engagement. These can be used to develop additional public engagement programs with a broader reach that will allow time for more detailed discussions of other approaches and potential unintended hardships.

PDP acknowledges a few limitations to the project outcome that could be improved for future efforts:

- The volume of information and the language of climate change were challenging factors that are likely to continue and must be thoughtfully moderated.
- Using an online survey did not allow the respondents to be verified as representatives of the intended audience.
- The value of the in-person participation was most significant for this project. Attendance at these meetings varied and could also be improved.

Despite these limitations, a tangible product is available to document feedback and provide a framework for continued public outreach:

- Participants clearly identified prominent focus areas for needed resources to serve environmental justice communities. (Refer to the table in the Executive Summary and Section 4.)
- This outreach effort identified potential organizations and participants, locations, formats, and resources required for continued community participation.
- An outline of climate change categories was developed to help translate complex information for public consumption.
- An online survey tool was developed that can serve as a model for a future survey.



(Source: PA DEP)

# 2 OPEN DISCUSSIONS SUMMARY

## OPEN DISCUSSION PARTICIPATION

- Meadville - 10 attended (7 registered)
  - Pittsburgh/Forest Hills - 24 attended (20 registered)
  - Scranton - 21 attended (25 registered)
  - Reading - 15 attended (27 registered)
  - Harrisburg - 23 attended (32 registered)
  - Norristown - 10 attended (18 registered)
  - Philadelphia - 9 attended (33 registered)
- Note: This was the only evening meeting.

Total open discussion attendees - 112

Total virtual attendees - 110

Most participants represented public agencies or non-profit entities.

## PARTICIPATION ASSESSMENT

Multiple offices within the DEP assisted with outreach efforts to connect open discussion opportunities with Pennsylvania residents facing environmental justice issues. Local Climate Action Plan groups, social organizations, the Environmental Justice Advisory Board, and specific individuals were contacted to reach community leaders familiar with climate change challenges in their area. This approach was an intentional effort to connect with participants through familiar environmental justice and climate change entities.

This represents the first public engagement project undertaken by the DEP Energy Programs Office for environmental justice issues. This section serves as documentation of the open discussions and provides key information that can be developed with subsequent outreach. Readers are asked to view this work as a starting point and a component of a much larger undertaking that should be incorporated during the development of Pennsylvania's future plans and programs.

## METHODOLOGY

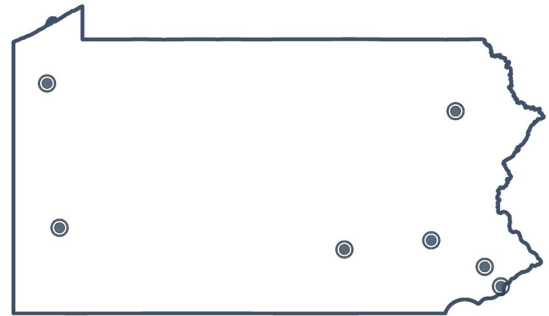
A total of seven open discussion sessions were held across Pennsylvania in communities selected by DEP as a reflection of a small cross-section of areas impacted by environmental justice issues. PDP and DEP recognize that attendees of these open discussions are a small representation of Pennsylvanians living in areas with environmental justice issues. The format and presentation materials can be modeled or repeated and are provided in this section for easy reference.

## OPEN DISCUSSION AGENDA

1. An agenda with supplemental information was provided to attendees.
2. A written description of 'Climate and Communities' was provided to describe the essential components of the project, and to identify climate change basics and climate impacts to Pennsylvanians.
3. Climate change sectors from the 2021 *Pennsylvania Climate Action Plan* were translated to climate change categories and described with associated contributions to emissions, risks, impacts, and general measures for taking action.
4. The agenda materials included space for note-taking, a list of all the open discussions, a phone, email and project website address, and a quick response (QR) code that links to the digital survey with a mobile device.

## OPEN DISCUSSION FORMAT

- Participants were encouraged to define *community* in a manner that suits them, whether it is the city or town hosting the open discussion, a regional perspective, or localized to a cultural or organizational representation.
- In each session, the format remained consistent so that the feedback could be synthesized across all areas for this report.
- DEP staff introduced the PDP facilitators and allowed participants to introduce themselves.
- Participants could ask questions and express concerns as a part of the group conversations, share their comments on note cards, or have individual conversations with the PDP team or DEP staff.
- Comments were not attributed to a person or an organization unless specifically requested.
- Participants were encouraged to share contact information to receive project updates.
- Cities were selected by DEP and community locations were planned in cooperation with local partners depending on space and resource accommodations.
- Presentation materials were planned as a 90-minute block of time and additional time at the end allowed PDP and DEP staff to engage in individual conversations.
- Sessions were broadcast online using Microsoft Teams to allow virtual audience members to observe the discussion in a listen-only mode. Online attendees were encouraged to submit comments in the online survey or to contact DEP via email.
- Comments were captured as a live note-taking process on the screen to allow participants to see what was being recorded and to clarify information as needed.



*Participation in the sessions was not limited to the specific host municipality and often included regional attendees.*

## OPEN DISCUSSION AGENDA

- a. Welcome and Introductions
- b. DEP Project Summary
- c. Meeting Goals
- d. Summary of Key Priorities and Strategies
- e. Interactive Session
- f. Online Survey Introduction
- g. Conclusions and Next Steps

## DISCUSSION QUESTIONS

Open ended questions were used to facilitate conversation after the presentation. The questions remained the same at each meeting and participants were encouraged to contribute information most applicable to them.

- *What did you hear that resonated most with you?*
- *What did we miss?*
- *What are the changes most relevant to a tenant? To a property owner?*
- *How can conditions be improved on your block?*
- *What can the community do to improve the circumstances?*
- *What is the responsibility of industry?*
- *What is the responsibility of state agencies?*
- *What needs to be provided for your constituency to have a voice in this*

## KEY ISSUES: OPEN DISCUSSIONS

When the open discussion began, the first topics that were identified by the participants consistently addressed **accessible transportation limitations** and **equity challenges**. This could be a factor in assessing priorities of the audience but it could also represent what attendees could most easily relate to from the presentation of the strategy categories.

Other interpretations may be drawn from evaluating the percentage of strategies that were recommended by participants during the open discussion. As a measure of relevance, a percentage was calculated based on how many strategies within the eight categories were represented across the seven open discussions.\* Not surprisingly, **86% of the DEP's potential strategies in the equity category were recognized as important by the participants. This was followed by 71% of the potential strategies in the property/site category, and 54% in the transportation category.** Public health (21%) had the least number of strategies discussed during the session. **Equity was clearly the most articulated category by the participants throughout all of the open discussions.**

Other general observations can be made from the topics that were discussed as well as what was not heard, and how the topics evolved during the conversation.

**1. Some of the presented strategies did not generate discussion during the listening session. Exploring the possible reasons for this may reveal additional insight.**

- The strategy simply may not be practical or desirable. For example, electric vehicles for personal use was not discussed as a preferred strategy likely due to the high cost and associated infrastructure requirements that make it less accessible for low-wealth communities.
- More education may be needed to promote the benefits of electric vehicles and understand the barriers. Before personal electric vehicles are pursued as a strategy, a significant investment in educational outreach and infrastructure funding may be necessary.

**2. For strategies least discussed, it may be important to compare them with the highly represented strategies to assess any common action themes and audiences. For example:**

- The strategies that were mentioned most in the public health category focused on measures to increase access using existing facilities and resources within the community. This may speak to whom and what entities should be leading program improvements.
- The remaining strategies can help eliminate the types of activities or applications not essential to the goal such as mandating workplace policies and building additional facilities to aid public health resources. Future endeavors can extrapolate these approaches to avoid such actions.

\* To evaluate the relevance of a strategy as an approach, PDP calculated the percentage of times the strategy was raised in open discussions. This methodology recognizes that a strategy raised in only one location may be a uniquely local issue not suited for a statewide guidance document.



Public transit improvements can increase access and safety by considering user needs. (Source: City of Reading)



Participant comments were captured on the screen for transparent communication.

3. **One of the benefits of the in-person open discussions is the opportunity for the attendees to discuss the questions being asked and how their framing and context could be changed to be more applicable.** When these types of conversations occurred, a more articulate perspective was captured outlining preferred priorities and approaches.
- In at least three open discussions, speakers expressed an impression that the presented strategies placed a lot of emphasis on individual responsibility. The suggested phrases show the importance of phrasing and word choice but also how direct and transparent language can promote constructive feedback.
  - Examples include asking whether a strategy is accessible or feasible to the audience rather than implying an individual or community is responsible for undertaking the strategy; and, asking the audience to identify potential entities that can implement changes.
  - This conversation clearly articulated the need to increase compliance and compliance requirements for existing industries and agencies. *(The DEP Energy Programs Office is not a regulating agent of the state, however this was an important discussion item in each session that needs to be recorded as equally important.)*



*Attendees volunteered their opinions and ideas that contributed to a conversational approach.*

*The following is a summary of the open discussions organized by strategy category. A table is provided for the specific category and the associated potential strategies established by DEP. Dots represent open discussions locations where this strategy was brought forth by participants. A separate section includes additional strategies that were suggested by participants during the discussion session. The summary also includes a brief narrative of the participant comments and PDP's observations.*

TRANSPORTATION STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Increase access to transportation options in urban areas	●	●	●	●	●		
Connect existing and new public transportation options to activity centers	●	●	●				
Develop new or convert existing public transportation vehicles to electric power					●		
Develop sidewalk safety best practices	●	●	●	●			
Inventory pedestrian features and sidewalks to develop improvement plan	●		●		●		
Incorporate safe bike/walking/multi-use paths into new and existing development	●	●					
Increase bike and e-bike sharing programs	●				●		
Increase electric vehicle use and charging stations for personal use vehicles							
Establish best practices to limit idling for commercial trucks							
Expand access to internet service		●					
Evaluate capacity and condition of roads and bridges, signage for alternate traffic flow	●						
Ensure emergency public transit schedules are available and broadly communicated	●						●
ADDITIONAL TRANSPORTATION STRATEGIES BY PARTICIPANTS							
Increase inter-agency cooperation between state and local government for transit and safety improvements		●	●		●		
Improve transportation without electric vehicle reliance			●				
Inventory public transit routes and benchmark safety data for route and connecting sites					●		
Focus electric vehicle benefits for state and local agencies					●		
Adopt complete street policies					●		



Bike lanes and dividers are features that can be considered in **complete streets design**, an approach that focuses on safe access for all users.

## TRANSPORTATION

- Norristown and Philadelphia were the two outliers that did not identify transportation as a priority.
- The most conversation focused on increasing access to public transportation and active transportation options; including multi-use traffic areas and sidewalk safety using complete streets modeling.
- Electric personal vehicles were not favored by the majority of communities. However, it was suggested that governments should take advantage of electric vehicle investments for their fleet.
- Inter-agency cooperation should be improved between state and local government for transportation and safety projects.
- Public transportation safety considerations should be evaluated based on an inventory of transit routes, connections, and safety.

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

PROPERTY/SITE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Develop a network to connect contractors with needs of residents/ property owners	●		●				●
Develop training and educational assistance programs to increase trade professionals			●				●
Replace/service roofs, windows/doors; improve insulation and air sealing		●	●			●	
Replace/service appliances and HVAC systems		●	●			●	
Install new energy efficient equipment		●	●				
Weatherize homes and buildings to protect from elements		●	●			●	●
Replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling		●	●	●		●	●
Guidance for residential property owners to use in determining renewable energy options				●	●	●	
Install solar power sources			●			●	
Require electric, on-site renewable energy, and minimum standards in new construction		●			●	●	
Increase capacity to enforce the most current building code			●	●	●	●	
Increase electric, on-site renewable energy, and minimum standards in existing buildings	●		●	●		●	●
Improve access for low to moderate wealth families in existing weatherization, energy, and grant programs	●	●		●	●	●	
Mandate public notice/label of building energy score as part of selling transactions			●				
Promote financial benefits of energy management with social media campaigns					●	●	
Improve flood risk to individual properties							
Abandon or reduce risk in living spaces below flood level							
Reduce hard pavement and other solid surface areas					●	●	●
Plant trees and native plants	●			●	●	●	
Strengthen local policies to limit stormwater runoff outside of individual property							●

(PROPERTY/SITE SUMMARY CONTINUES ON NEXT PAGE)

PROPERTY/SITE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
<b>ADDITIONAL PROPERTY/SITE STRATEGIES BY PARTICIPANTS</b>							
Increase compliance standards for large sites that considers community priorities		●					
Regulate landlord/tenant performance requirements		●				●	
Evaluate project development and implementation that mitigates gentrification			●		●	●	●
Fund energy audits and property improvements particularly for rental properties			●				
Mitigate polluted property before new development is permitted			●				
Disincentivize grass lawn cover				●			
Modify grant programs to fund weatherization in anticipation of energy upgrades						●	



Energy retrofits should be considered only if a building is weatherized or the program will include necessary weatherization improvements. (Source: City of Ithaca, NY)



Industries can be motivated to change with incentives and support by broad efforts to increase mandated compliance. (Source: PA DEP)

## PROPERTY/SITE SUMMARY

- Meadville participants expressed the least concerns in this category and Norristown expressed the most concerns.
- Weatherization, energy efficiency, and securing the building envelope of individual homes received the most attention in this category, including funding investments to improve standards of existing homes and replacing oil-based energy sources.
- A related concern is the need to expand any energy retrofitting program to allow basic building improvements that are essential to basic housing needs that is not limited to owner-occupied homes.
- Other strategies with moderate attention included increasing enforcement capacity for existing building and housing codes and planting trees.
- The discussion recognized that tenants can benefit from property management requirements for landlord transparency and maintenance performance.
- The potential for any program to increase gentrification should be identified to allow mitigation efforts to be pursued.

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

FUEL SOURCE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Develop a model of solar field installations at a community scale	●			●			●
Form a solar co-op in neighborhoods to reduce the cost of installing solar	●			●			●
Create model legislation to enable and promote community solar			●	●			
Increase the transfer of waste products to farming, gas distributors, and utility authorities							
Support nuclear power centers so existing electricity generation levels remain consistent							
Develop a model for wind power generation at a community scale							
Mitigate mine drainage and control methane leaks from abandoned mines				●			
Increase compliance requirements to reduce uncaptured methane emissions	●		●	●	●	●	●
Increase use of microgrids for large commercial facilities for on-site and power distribution							●
Locate and cap/cover orphaned and abandoned methane wells		●	●	●			
ADDITIONAL FUEL SOURCE STRATEGIES BY PARTICIPANTS							
Develop policy and programs to remediate contaminated sites for small industries	●						
Require adjacent fuel source centers to provide energy to host community		●					
Fund energy transition programs				●			
Provide incentives for fuel industries to reduce consumption					●		
Require industries to be transparent to communities and their environmental impacts					●	●	
Impose impact fees for polluters and provide public disclosure; issue fines in order of magnitude						●	
Develop energy policies with a coordinated timeline							●
Legislate/prohibit drilling waste at landfill sites and cease permitting polluters		●					
Prioritize energy improvements for those dependent on electricity for health						●	

## FUEL SOURCE SUMMARY

- All but one community discussed the broad necessity of increasing compliance measures for fuel industries and related businesses in the manner of impact fees, fines in order of pollution magnitude, prohibiting drilling waste from being deposited in landfills, and ceasing polluting operations altogether. *(Because the DEP Energy Programs Office is not a regulating agent of the state, policy changes are outside of their authority. EPO programs will focus on incentives and transparency.)*
- Solar installations were discussed in the context of model installation at a community scale, co-ops that can reduce individual costs, and enabling legislation for communities to implement solar programs.
- Abandoned wells continue to be a concern for communities in the Forest Hills/Pittsburgh, Scranton, and Reading areas.
- The poignant statement was made more than once that the state is heavily reliant on fossil fuels which is inhibiting individuals and government agencies from committing to alternate fuel sources.
- Concerted efforts should also be made for fuel industries to contribute to their surrounding communities by extending their service to the host community.

PUBLIC HEALTH STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Share model policies that can address heat and health risks in workplace environments							
Create an implementation schedule for employers to adopt workplace safety measures							
Require employers to implement risk mitigation/minimization plans							
Identify plans to address heat and health risks in areas of low-income housing							
Protect urban gardens and greenspace from development						●	
Build healthcare education programs for schools and the health-care industry							
Construct heating and cooling relief centers which are also health and communication resources							
Equip existing public facilities for short term conversion to relief/distribution centers		●	●				
Partner with big box retail centers to install short-term relief areas							
Ensure information and supply distribution centers are well advertised and accessible		●	●				
Coordinate with neighborhood and/or community organizations for distribution needs		●	●		●	●	
Assess needs for additional child care facilities to accommodate families in emergencies							
Include temporary nurse staffing for home visits during emergencies							
Deliver resources to communities during boil-water notices							
ADDITIONAL PUBLIC HEALTH STRATEGIES BY PARTICIPANTS							
Recognize increase of ticks and vector-borne disease	●			●			
Address health issues in school facilities and provide space for public resources	●						●
Prohibit/disincentivize smoking in multi-family housing				●			
Increase access to fresh food produce delivery services				●			●
Recognize public safety benchmarking in climate change strategies including gun violence						●	
Construct recreational facilities or increase access			●				
Increase surplus food programs to replenish food pantries					●		

## PUBLIC HEALTH SUMMARY

- Health issues were brought up in the context of air and water quality discussions which were addressed in other strategy categories. This may explain the lower percentage of strategies that were discussed in public health.
- Distributing information, supplies, and providing shelter or short-term relief should be coordinated with existing community groups and use existing facilities including potentially adapting schools for this purpose.
- Food resource strategies are also a necessity and can include fresh produce delivery services and finding food surpluses to replenish food pantries.
- Benchmarking public safety and mental health with climate change strategies can educate the general public and motivate policy makers to increase their support.

INFRASTRUCTURE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Improve on-site storm water management practices		●		●	●	●	
Identify assets and systems in flood risk areas						●	
Update aging stormwater infrastructure to include anticipated long-term needs	●					●	
Actively reduce hard or paved surfaces and transition to natural surfaces				●			
Identify transportation routes subject to flooding or sea level rise	●						
Build structural improvements (seawalls, raise roadbeds, culverts)	●						
Construct temporary housing center or units for housing shortages during emergencies							
ADDITIONAL INFRASTRUCTURE STRATEGIES BY PARTICIPANTS							
Prioritize natural infrastructure mechanisms				●			
Coordinate development projects with environmental design, benchmark crime reduction			●				
Review, evaluate, and implement successes of infrastructure programs (CRW Big Green Block), University of Harrisburg data, Local Climate Action Plans (see resources in section 5)					●		

## INFRASTRUCTURE SUMMARY

- Meadville and Norristown participants expressed concern for half of the strategies presented regarding flooding and overall there was little discussion on this topic across the communities.
- Improving on-site storm water management practices received the most consensus as a needed strategy.
- Other strategies raised in the discussions related to prioritizing natural infrastructure mechanism for flood control and referred to successfully implemented local programs that can be expanded (such as the Camp Curtin YMCA Big Green Block project by Capital Region Water, [capitalregionwater.com](http://capitalregionwater.com)).
- With a broadened perspective, there may be an association with environmental design features and crime reduction that can be used to gain more support when new developments are planned.



*On-site property drainage is key to improving community challenges with stormwater. (Source: Township of Susquehanna)*

NATURAL ENVIRONMENT STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Convert urban open spaces, grasslands, pastures, and marginal crop land to forest							
Establish new forests on abandoned mine lands							
Extend harvest cycle based on type and location to manage pests, disease, etc.							
Encourage multi-season use of recreational facilities							
Establish a statewide research network with businesses to record conditions		●	●		●		
Use easements and incentives to allow migration across private property							
Increase public ecosystem restoration and conservation abilities	●		●	●		●	
ADDITIONAL NATURAL ENVIRONMENT STRATEGIES BY PARTICIPANTS							
Encourage nurseries for state road improvements				●			
Substantiate natural environment strategies with education, identify local impacts					●		
Prioritize clean water and develop water resources for community decision-making					●		●



Restoration of public greenspaces can improve natural ecosystems and promote conservation.

### NATURAL ENVIRONMENT SUMMARY

- Other than increasing public ecosystem and conservation efforts, most of the DEP strategies presented in this category do not address the concerns of the participants.
- One strategy discussed by participants included establishing nurseries to provide trees for state road improvements.
- Planning, decision-making, and education should be included to substantiate how natural environmental strategies will impact micro-local communities.
- Natural water resource conservation is particularly important and should be prioritized in local decision making processes.

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

STRATEGIC POLICIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Increase waterway buffer requirements				●			
Prohibit development in high-risk areas							
Increase housing density							
Incentivize landscape requirements that include vegetation and natural water management resources	●	●	●	●			
Transition previously developed land into natural reclamation areas			●				
Transition vacant lands for reclamation, renewable energy, or conservation		●			●		●
Eliminate barriers to urban gardening and farming			●				●
Reduce policy barriers to voluntary land conservation							
Regulate food and business waste					●		
Increase availability and access to recycling programs			●	●			
Create graphic materials for flood and building code resources	●	●					
Discourage/limit new development in flood risk areas				●			
Incorporate heat/cold/flood-related emergencies into existing building emergency and planning documents							
Include neighborhood and/or community leaders in strategic planning meetings	●	●	●		●	●	●
Increase requirements to fund or build affordable housing, schools, healthcare facilities, and transportation systems with new development		●			●		●
Provide average-monthly rate billing versus monthly-actual							
Develop voluntary contributions to utility customers for a relief fund							
<b>ADDITIONAL STRATEGIC POLICIES BY PARTICIPANTS</b>							
Develop inter-agency coordination systems that include public access	●						
Increase staff resources for state agencies	●						
Support municipalities with policy and public meeting management		●					
Re-establish planning regional commissions		●					
Leverage data from model plans, data sources, and other state or national publications		●					
Fund Sustainable Pennsylvania Communities program ( <i>pml.org</i> )			●				
Separate DEP responsibilities of regulatory compliance and policymaker			●				
Standardize waste and recycling collection			●				
Assess impact fees and provide public notices for landfills and mines that can fund private utility customers			●			●	
Prioritize business and industry compliance before individual compliance			●			●	●
Adopt water utility rates that account for usage, impervious surface, affordability index				●			
Modify cost-benefit analysis to incorporate diverse indicators				●			

(STRATEGIC POLICIES SUMMARY FOLLOWS ON NEXT PAGE)

STRATEGIC POLICIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
(Participant Strategies, continued)							
Implement recommendations of previously plans and identify reasons for action/inaction					●	●	
Provide zoning incentives for shade trees and structures							●
Evaluate overhaul of waste management							●
Impose a wealth tax							●
Remove state legislative barriers to improve municipal access and implementation							●
Create soil and water management agency							●
Fund programs with lifecycle sustainability		●					
Publish and promote educational materials about individual actions				●	●	●	
Provide waste management education including benefits incinerators and landfills						●	
Encourage inter-agency cooperation between state and local governments for plastic bag bans and vulnerable energy sources						●	



Distribution of information and supplies should be coordinated with existing community leaders. (Source: FEMA)



Strategic policies will require dedicated effort and funds to create community benefits.

## STRATEGIC POLICIES SUMMARY

- Out of many types of strategic policies, there was most consensus that neighborhood and community leaders must be included in all phases of program and project development from design to implementation.
- Accountability needs to be built into all programs and agencies.
- Specific strategies discussed include using incentive programs and zoning for landscape and natural water management improvements, converting vacant lands toward community-driven purposes, re-establishing regional planning commissions, providing funding for Sustainable Communities program, and increasing community benefits as a requirement for new development.
- Waste management was a common issue discussed, recognizing the need to standardize waste and recycling collection and provide community education regarding waste management methods from incinerators to landfills.
- Recommendations for utility benefits included setting impact fees and creating publicly available evaluations of landfills and mines that can be transferred to reduced private utility bills; and, adopting water utility rates accounting for usage, impervious surface, and calibration with new affordability index.
- Program level improvements are needed to separate DEP compliance and policy roles, creating soil and water management agencies, prioritizing business and industry compliance before individuals, and modifying cost-benefit analyses to incorporate diverse indicators.

# CLIMATE ACTION STRATEGIES FOR ENVIRONMENTAL JUSTICE COMMUNITIES

EQUITY STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Incorporate community scientist programs, community observations in public data collection, and benchmark reporting systems	●						
Publish visual graphics and data in clear language		●	●	●	●		
Provide resources for local organizations already serving vulnerable populations	●	●	●	●	●	●	
Increase funding goals for programs dedicated to vulnerable communities	●	●	●	●	●	●	
Evaluate existing policies that are burdensome for low wealth/ transportation-challenged individuals	●	●		●	●	●	
Create alternate measures for compliance for policies that are overly burdensome	●				●	●	
Develop alternate language and media for educational and compliance docs		●	●	●	●		
ADDITIONAL EQUITY STRATEGIES BY PARTICIPANTS							
Develop communication toolkits to empower existing organizations	●						●
Modify grant programs to increase enrollment, ease accessibility, improve management, prioritize multi-community benefit projects, ease hard cash match requirements		●		●	●		●
Build relationships with local communities through intentional and meaningful practice			●				
Prioritize funding for smaller communities with partnerships of municipalities and industry			●				
Recognize communities near fuel industries are distinct and independent			●				
Develop citizen empowerment programs			●			●	
Promote community leadership				●			
Recognize equity benchmarking in all areas and programs					●		●
Unify communications across agencies, focus on climate change impacts to everyone, and develop specialized messaging for younger audiences					●		●
Consolidate state agency communications with environmental justice communities to minimize stakeholder fatigue and maximize participation						●	
Create ombudsman program						●	
Provide deliverable for any community participation event							●
Provide public reporting and broadly accessible information about state spending on federal improvement programs							●
Focus on systemic solutions						●	●
Require accountability for all programs and state and local agencies including financial supporters		●	●	●	●	●	●
Create block captain program as a compensated community benefit							●
Deploy asset mapping							●
Establish environmental justice law							●
Build relationships with local communities through intentional and meaningful practice of engagement including compensation							●

## EQUITY SUMMARY (FROM PREVIOUS PAGE)

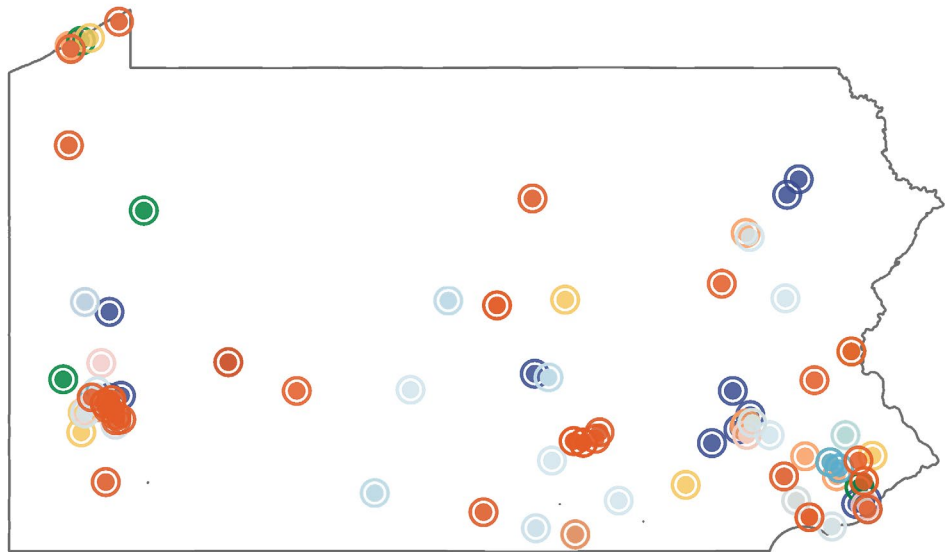
- Comprehensive and accessible programs with tangible and immediate benefits must be prioritized to include increasing the capacity of existing organizations from staff support, funding, overhauling grant programs to improve accessibility and administration, and developing visual and multi-lingual communication strategies in multi-media platforms.
- Development of citizen and leadership empowerment toolkits, equity benchmarking, project deliverables, asset mapping, and compensation abilities to help build relationships with community members and participating organizations.
- Unify communications across agencies, anticipate unintended consequences, and target broad and narrow audiences using an ombudsman/block-captain approach to reduce engagement burdens.

ADDITIONAL CATEGORIES

OPEN DISCUSSION WORKFORCE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Prioritize workforce strategies to address fair labor, energy, housing, salaries, and affordability challenges					●	●	●

OPEN DISCUSSION AGRICULTURE STRATEGIES	MEADVILLE	FOREST HILLS/ PITTSBURGH	SCRANTON	READING	HARRISBURG	NORRISTOWN	PHILADELPHIA
Preserve agricultural areas to function as carbon storage				●			
Improve internet access for rural areas				●			

- TRANSPORTATION SURVEYS
- PROPERTY/SITE SURVEYS
- FUEL SOURCE SURVEYS
- PUBLIC HEALTH SURVEYS
- INFRASTRUCTURE SURVEYS
- NATURAL ENVIRONMENT SURVEYS
- STRATEGIC POLICY SURVEYS
- EQUITY SURVEYS



# 3 ONLINE SURVEY

## ONLINE SURVEY PARTICIPATION

- Transportation - 51
- Property/Site - 31
- Fuel - 33
- Public Health - 17
- Infrastructure - 19
- Natural Environment - 41
- Strategic Policy - 19
- Equity - 26
- Free Form - 32

There was an equal percentage of urban city and suburban responses and an equal percentage of rural and small town responses.

- 269 online surveys were completed
- 83 zip codes were represented in survey responses

Data was compiled from online surveys completed between March 9, 2023 and June 1, 2023.

## PARTICIPATION ASSESSMENT

The Open Discussions were carried out in seven established meetings in selected communities over a short period of time. To reach a broader audience and provide participation flexibility, an online survey was developed. Access to the online survey was freely accessible and was promoted by DEP, PDP during the open discussions, in addition to email correspondence with Local Climate Action Plan groups and the Environmental Justice Advisory Board. Because of the nature of the multiple online surveys and anonymity, there are limited details of participants. The respondents are a small fraction of the Commonwealth and the response data should be evaluated with this in mind. Additional comments and a free-form online survey collected written opinions and concerns. All materials from the online survey were provided to DEP for future reference.

## METHODOLOGY

Building upon the categories established for the open discussions, the online survey opened the conversation for more Pennsylvanians to contribute their views. Each category is represented in a separate survey that allowed users to focus on the subject areas of interest to them. All of the surveys were accessible from a website homepage with summary information provided about each survey. To increase access to the survey, English and Spanish language options were available and the survey could also be accessed from a quick response (QR) code on a mobile device.

An open, online survey platform was created using the ArcGIS Survey 1-2-3 application provided by Esri. Using this technology allows for data collection and analysis with geographic information systems now and in the future which can be integrated with existing geographic data to develop further analysis. This will be beneficial as DEP updates environmental justice community data and climate strategy programs.

## ONLINE SURVEY COMPONENTS

Each online survey began with a brief description of the purpose for the survey and asked users for their zip code to establish the geographic region where they live. Respondents were also asked to describe the community where they live from the following options:

- Small town
- Urban city
- Rural
- Industrial
- Suburban

After this page, subsequent survey questions vary while following the same format. The individual survey was separated into multiple screen pages to facilitate the user process with the option to save their progress and return to the survey at a later time.

After each section, a blank space is provided for users to enter “other” information as needed. The only required survey responses are zip code, community description, and the first strategy question; providing the minimal amount of information needed to guide DEP toward preferred, potential strategies.

## KEY ISSUES: ONLINE SURVEY RESPONSES

Strategies highlighted in the following section are based upon analysis of the online survey results. Because the online survey captured a very small percentage of respondents compared to the state’s population, these responses should be taken broadly and used to seek additional feedback with the next outreach effort.

Note that in each online survey response the leadership was primarily noted as a state or local government initiative or a community organization within the strategy category. There are individual and ‘other’ options available but these responses show up as negligible when considering the strategy category as a whole.

## ONLINE SURVEY QUESTIONS

Each of the 92 potential strategies within a climate change category was followed by a series of questions:

- How important are these strategies to you?  
*Options: Very important, Important, Not important*
- What type of action or assistance could help?  
*Options: Financial, Educational, Legal or Policy Change, Other*
- Who is the best leader for this effort?  
*Options: Community Organization, Individual, State or Local Government, Other*
- How easy or difficult would this change be?  
*Options: Very easy, Somewhat easy, No change for me, Challenging, Very difficult*
- Could any of these create a negative impact for you?  
*Options: Yes, I don’t know, No*
- Other concerns  
*Optional free form comment*

## GUIDE TO SUMMARY FORMAT

For comparison, each of the online surveys are summarized using the same indicators. Each information field is located in the same place on the page and uses the same method to generate the information presented.

- **Respondents:** Number of responses, ratios of those responses to how they identify their home community, and an indication of the volume of additional comments related to the strategy.
- **Primary Leader for Strategies:** All of the strategies could have a different answer but most often state/local government or community organization was selected.
- **Comment Field Summary**
- **Top 3 ‘Very Important’ Strategies**
- **Strategies with 50% or more ‘Very Important’ Responses**
- **Highest ‘Not Important’ Strategy**
- **Strategy Importance Graph:** Includes all of the strategies in this category, labeled with the number of respondents.

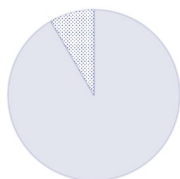
## RESPONDENTS

51 Total Respondents, 28 with comments

- 33% Urban city
- 33% Suburban
- 14% Small town
- 18% Rural

Primary Leader for Strategies

- State/Local Government
- ▨ Community Organization



## COMMENT FIELD SUMMARY

- High costs for electric vehicles and lack of infrastructure
- Potential for tax increases
- Gentrification needs to be identified and mitigated
- Impacts to travel time were commonly recognized as the potential to create a negative impact

## TRANSPORTATION

### STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Connect existing and new public transportation options to activity centers (63%)
2. Evaluate capacity and condition of roads and bridges, signage for alternate traffic flow (63%)
3. Expand access to internet service (59%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

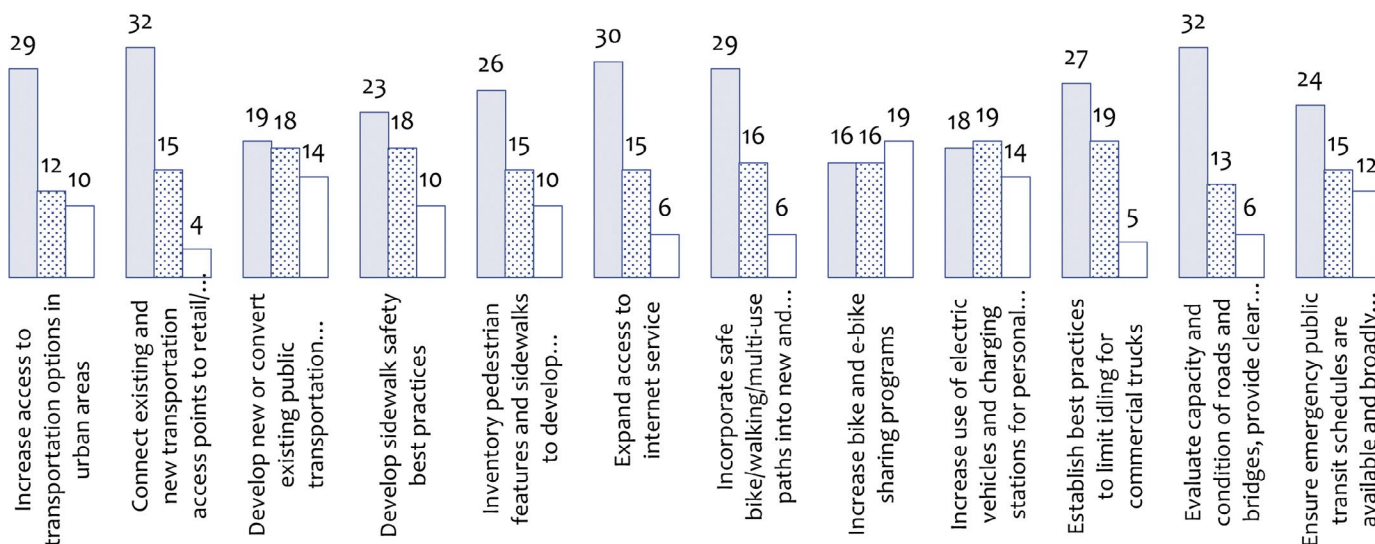
4. Increase access to transportation options in urban areas (57%)
5. Inventory pedestrian features and sidewalks to develop improvement plan (51%)
6. Incorporate safe bike/walking/multi-use paths into new and existing development (57%)
7. Establish best practices to limit idling for commercial trucks (52%)

### THE STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

8. Increase bike and e-bike sharing programs (37%)

## STRATEGY IMPORTANCE

- Very Important
- ▨ Important
- Not Important



## PROPERTY/SITE

### STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Plant trees and native plants (77%)
2. Develop training and educational assistance programs to increase trade professionals (68%)
3. Replace/service roofs, windows/doors; improve insulation and air sealing (61%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

4. Install new energy efficient equipment (55%)
5. Install solar power sources (55%)
6. Guidance for residential property owners to use in determining renewable energy options (52%)
7. Require electric, on-site renewable energy, and minimum standards in new construction (52%)
8. Improve access for low to moderate wealth families in existing programs (52%)
9. Strengthen local policies to limit stormwater runoff outside of individual property (52%)

### STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

10. Mandate public notice/label of building energy score as part of selling transactions (35%)

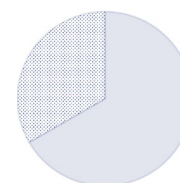
## RESPONDENTS

51 Total Respondents, 28 with comments

- 39% Urban city
- 29% Suburban
- 23% Small town
- 10% Rural

Primary Leader for Strategies

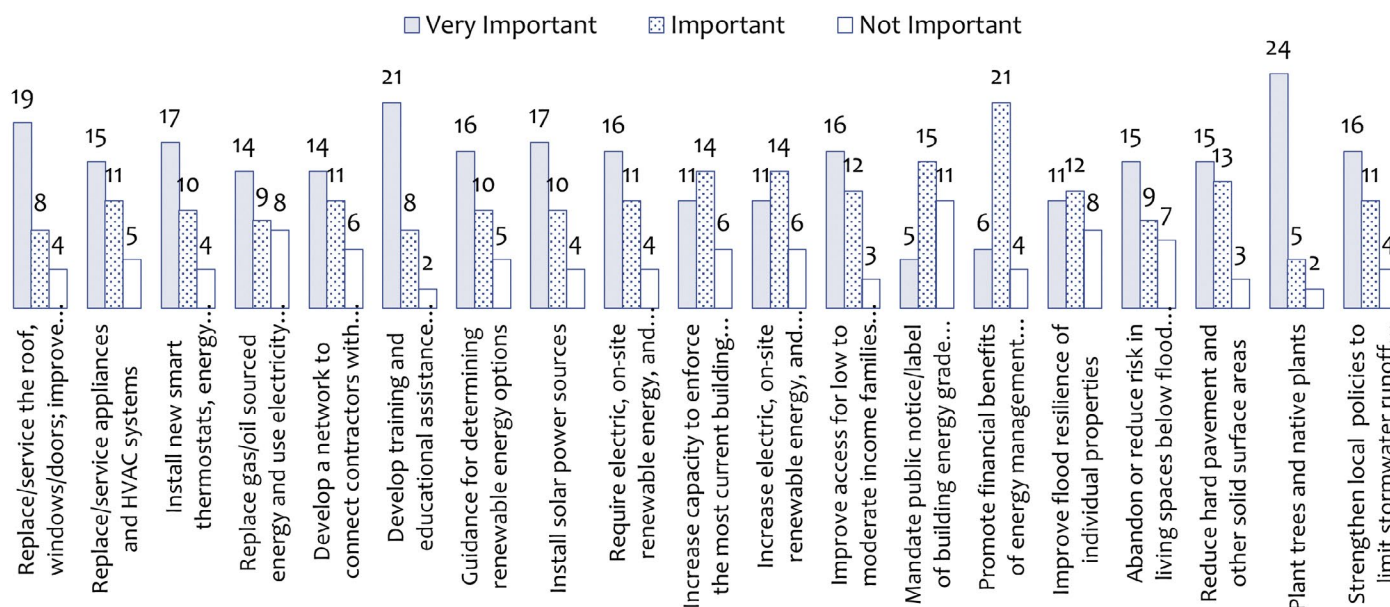
- State/Local Government
- ▨ Community Organization



## COMMENT FIELD SUMMARY

- High costs for property improvements especially renewable energy sources
- Prevalence of older housing stock
- Reliance on natural gas was recognized as the potential to create a negative impact
- Need for more education and proliferation of natural strategies

## STRATEGY IMPORTANCE



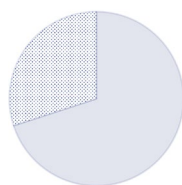
## RESPONDENTS

33 Total Respondents, 14 with comments

- 33% Urban city
- 23% Suburban
- 15% Small town
- 12% Rural

Primary Leader for Strategies

- State/Local Government
- Community Organization



## COMMENT FIELD SUMMARY

- Concern for impact of compliance regulations for residents/tenants
- Regulators bill customers at a commercial rate if they produce on-site energy
- Financial burden of solar installations
- Dangers of nuclear power
- Resources for educating people on renewable energy options and decreasing reliance on natural gas

## FUEL SOURCE

STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Increase compliance requirements to reduce uncaptured methane emissions (72%)
2. Locate and cap/cover orphaned and abandoned methane wells (67%)
3. Create model legislation to enable and promote community solar installations (64%)

OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

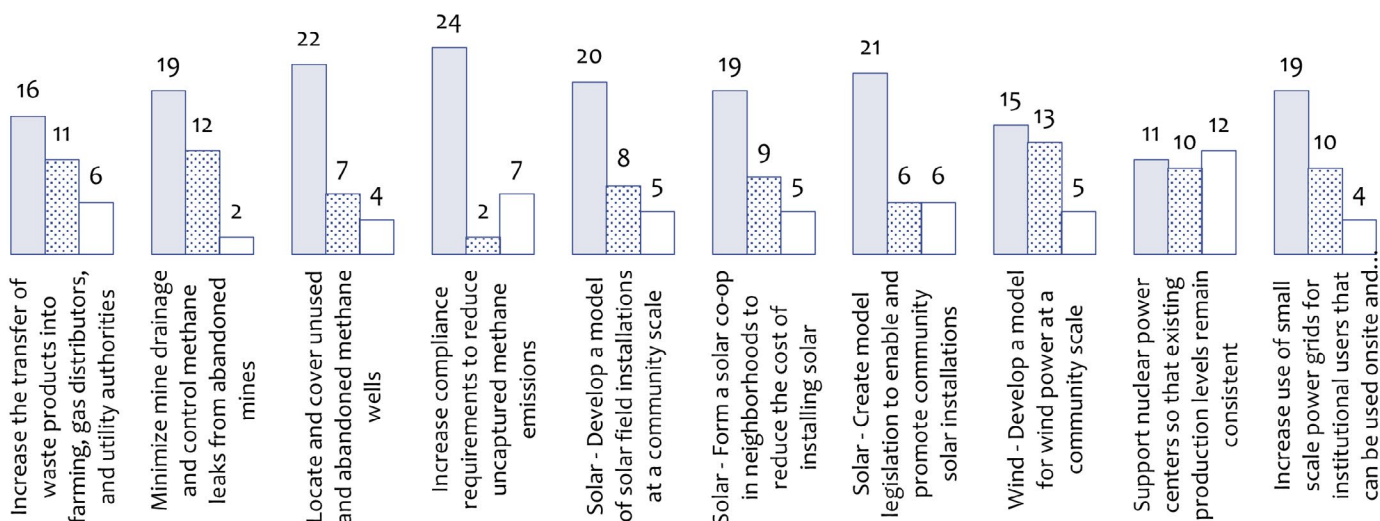
4. Form a solar co-op in neighborhoods to reduce the cost of installing solar (58%)
5. Develop a model of solar field installations at a community scale (61%)
6. Mitigate mine drainage and control methane leaks from abandoned mines (56%)
7. Increase use of microgrids for large commercial facilities for on-site and power distribution (58%)

THE STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

8. Support nuclear power centers so existing electricity generation levels remain consistent (36%)

## STRATEGY IMPORTANCE

■ Very Important   ■ Important   ■ Not Important



## PUBLIC HEALTH

### STRATEGIES WITH THE TOP 3 HIGHEST PERCENTAGE VERY IMPORTANT RESPONSE:

1. Protect urban gardens and greenspace from development (71%)
2. Identify plans to address heat and health risks in areas of low-wealth housing (tie 65%)
3. Assess needs for additional child care facilities to accommodate families in emergencies (tie 65%)
4. Deliver resources to communities during boil-water notices (tie 65%)
5. Require employers to implement risk mitigation/minimization plans (tie 65%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

6. Equip existing public facilities for short term conversion to relief/distribution centers (53%)
7. Coordinate with neighborhood and/or community organizations for distribution needs (59%)
8. Include temporary nurse staffing for home visits during emergencies (53%)

### STRATEGY WITH THE HIGHEST PERCENTAGE OF NOT IMPORTANT RESPONSE:

9. Partner with big box retail centers to install short-term relief areas (41%)

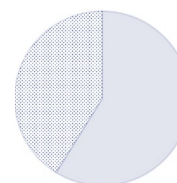
## RESPONDENTS

17 Total Respondents, 5 with comments

- 29% Urban city
- 35% Suburban
- 18% Small town
- 12% Rural

Primary Leader for Strategies

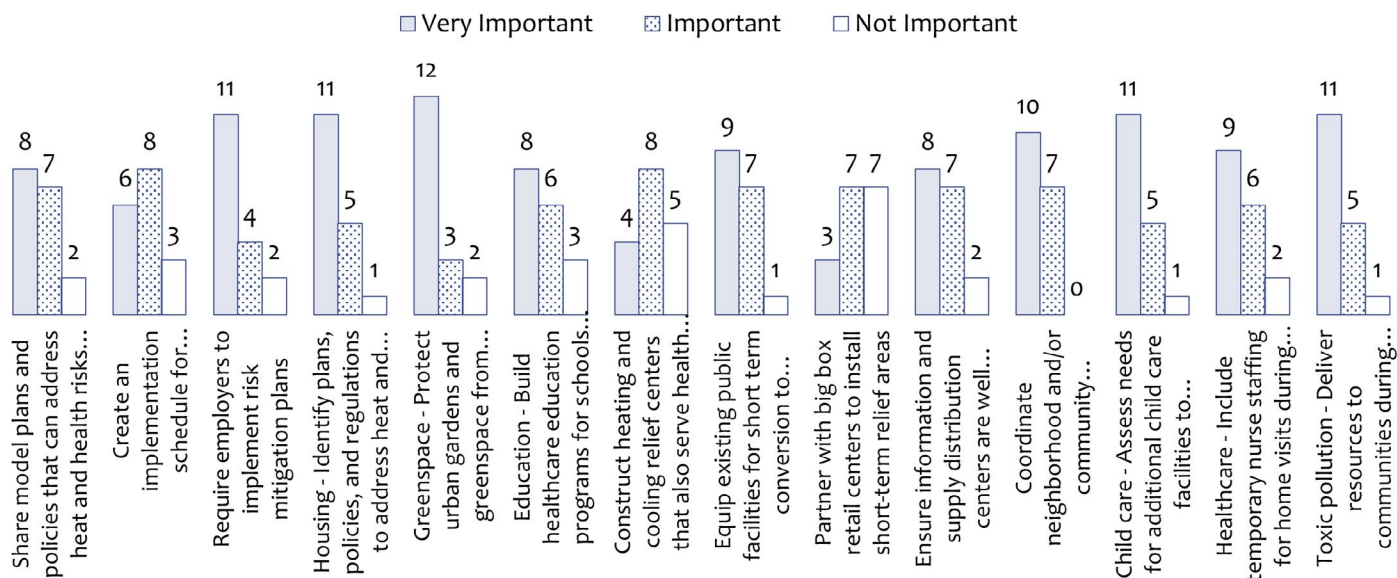
- State/Local Government
- ▨ Community Organization



## COMMENT FIELD SUMMARY

- OSHA and other agencies are already leading this strategy
- Large amount of rental housing means tenants are at the will of the landlord
- Mental health, community, and healthcare provider education need to be linked
- A comprehensive plan is needed to transition to renewable energy

## STRATEGY IMPORTANCE



## RESPONDENTS

19 Total Respondents, 6 with comments

- 37% Urban city
- 37% Suburban
- 16% Small town
- 11% Rural

Primary Leader for Strategies

- State/Local Government
- Community Organization



## INFRASTRUCTURE

**STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:**

1. Identify assets and systems in flood risk areas (74%)
2. Update aging stormwater infrastructure to include anticipated long-term needs (74%)
3. Actively reduce hard or paved surfaces and transition to natural surfaces (68%)

**OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:**

4. Improve on-site storm water management practices (58%)
5. Identify transportation routes subject to flooding or sea level rise (53%)

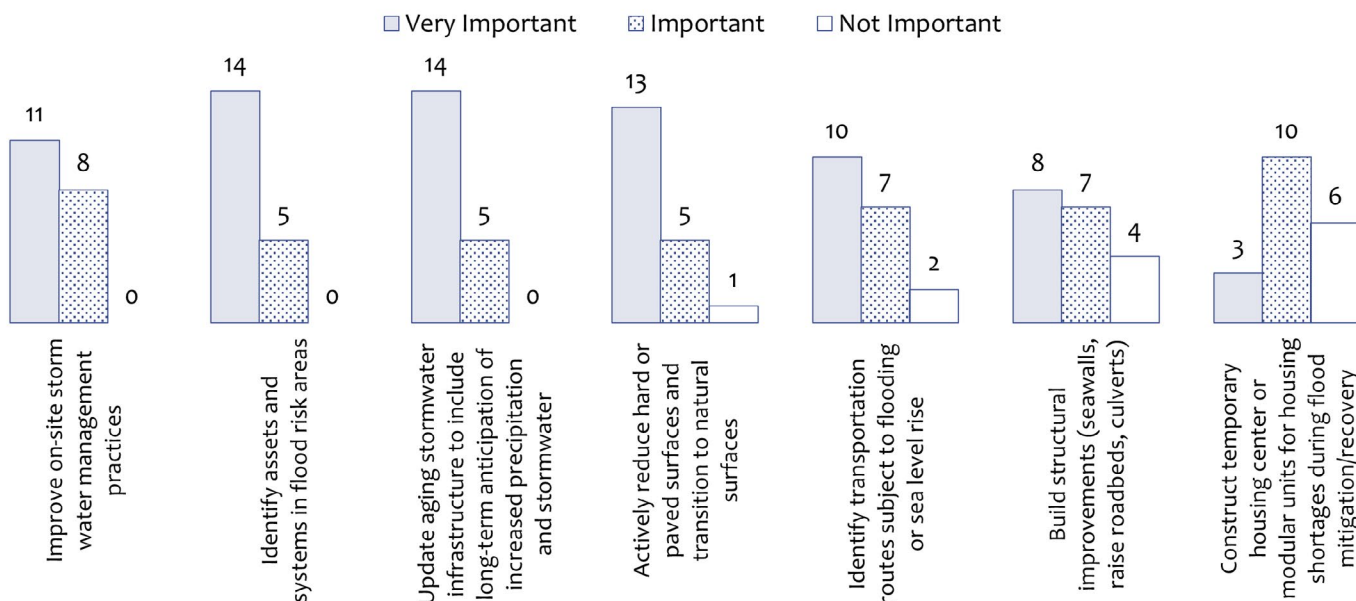
**STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:**

6. Construct temporary housing center or units for housing shortages during emergencies (32%)

## COMMENT FIELD SUMMARY

- Potential for taxpayers to face increased taxes or utility fees to pay for infrastructure repairs and construction
- Potential for taxpayer funds to be used for private property improvements in lieu of retreat methods

## STRATEGY IMPORTANCE



## NATURAL ENVIRONMENT

### STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Increase public ecosystem restoration and conservation abilities (66%)
2. Establish new forests on abandoned mine lands (54%)
3. Use easements and incentives to allow migration across private property (51%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

Not applicable

### STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

4. Use easements and incentives to allow migration across private property (tie 20%)
5. Convert urban open spaces, grasslands, pastures, and marginal crop land to forested areas (tie 20%)

## RESPONDENTS

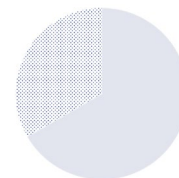
41 Total Respondents, 14 with comments

- 15% Urban city
- 42% Suburban
- 27% Small town
- 15% Rural
- 2% Other

Primary Leader for Strategies

State/Local Government

Community Organization

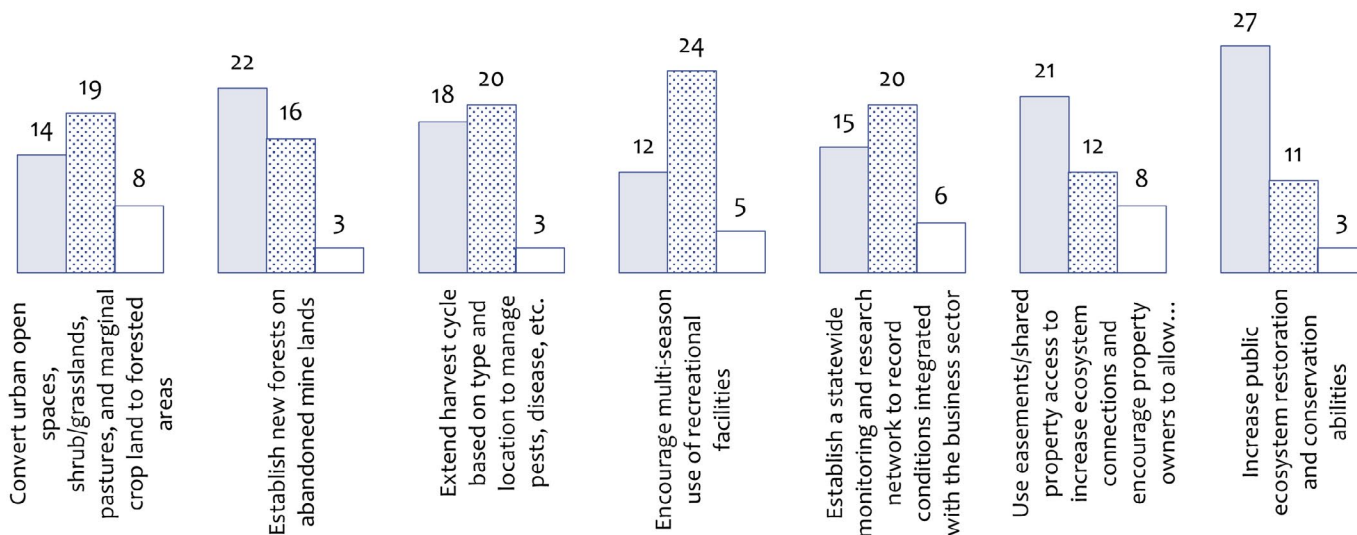


## COMMENT FIELD SUMMARY

- There are unique and delicate challenges in ecosystem restoration both from an interdisciplinary, scientific perspective
- Political challenges arise from the lack of public lands and existing forested areas
- There is no cohesive institution that can affect change on private or public land

## STRATEGY IMPORTANCE

Very Important    Important    Not Important



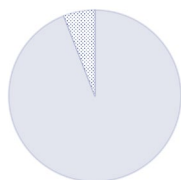
## RESPONDENTS

19 Total Respondents, 6 with comments

- 32% Urban city
- 32% Suburban
- 11% Small town
- 21% Rural
- 5% Other

Primary Leader for Strategies

- State/Local Government
- Community Organization



## COMMENT FIELD SUMMARY

- Consequences of additional density
- Resistance to using lands for solar and wind
- Impacts of buffer areas on existing residences
- Support for remediating existing abandoned sites, increasing compliance for waste requirements, more composting and upstream solutions

## STRATEGIC POLICIES

### STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Discourage/limit new development in flood risk areas (84%)
2. Prohibit development in high-risk areas (79%)
3. Include neighborhood and/or community leaders in strategic planning meetings (79%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

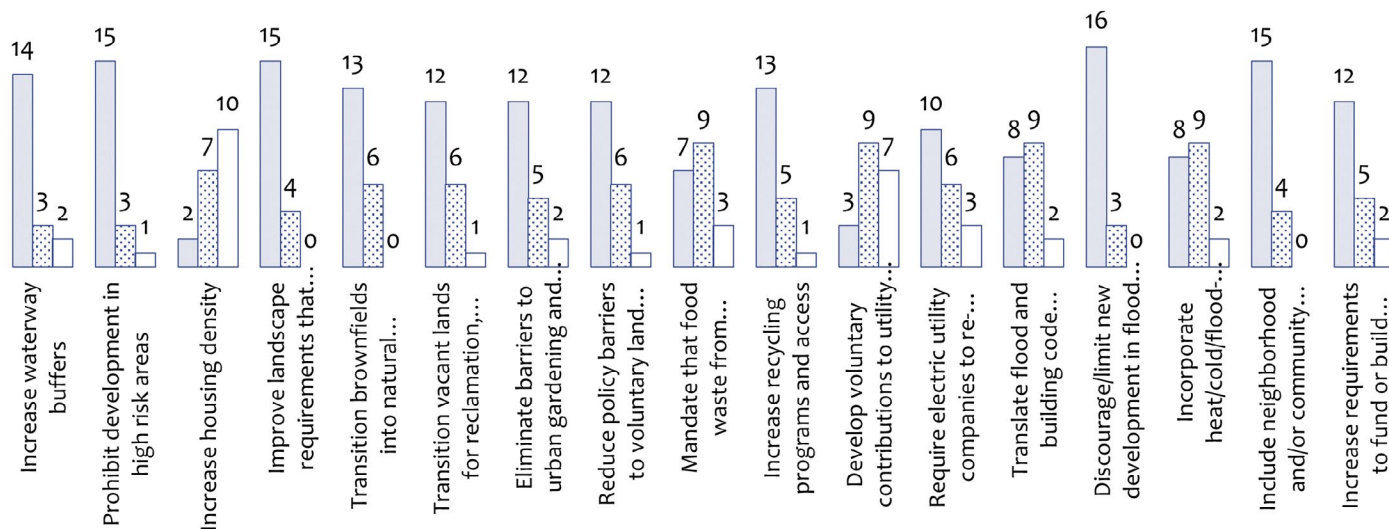
4. Increase housing density (53%)
5. Transition previously developed land to natural reclamation areas (68%)
6. Transition vacant lands for reclamation, renewable energy, or conservation (63%)
7. Eliminate barriers to urban gardening and farming (63%)
8. Reduce policy barriers to voluntary land conservation (63%)
9. Increase availability and access to recycling programs (68%)
10. Increase requirements to fund or build affordable housing, schools, healthcare facilities, and transportation systems with new development (63%)
11. Provide average-monthly rate billing versus monthly-actual (53%)

### STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

12. Develop voluntary contributions to utility customers for relief fund (37%)

## STRATEGY IMPORTANCE

- Very Important
- Important
- Not Important



## EQUITY

### STRATEGIES WITH THE TOP 3 HIGHEST VERY IMPORTANT RESPONSES:

1. Provide resources for local organizations already serving vulnerable populations (65%)
2. Publish visual graphics and data in clear language (61%)
3. Evaluate existing policies that are burdensome for low wealth/ transportation-challenged (tie 58%)
4. Create alternate measures for compliance for policies that are overly burdensome (tie 58%)

### OTHER STRATEGIES WITH OVER 50% OF VERY IMPORTANT RESPONSES:

5. Develop alternate language and media for educational and compliance documents (50%)

### STRATEGY WITH THE HIGHEST NOT IMPORTANT RESPONSE:

6. Incorporate community scientist programs, community observations in public data collection, and benchmark reporting systems (23%)

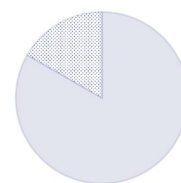
### RESPONDENTS

26 Total Respondents, 11 with comments

- 38% Urban city
- 27% Suburban
- 15% Small town
- 15% Rural

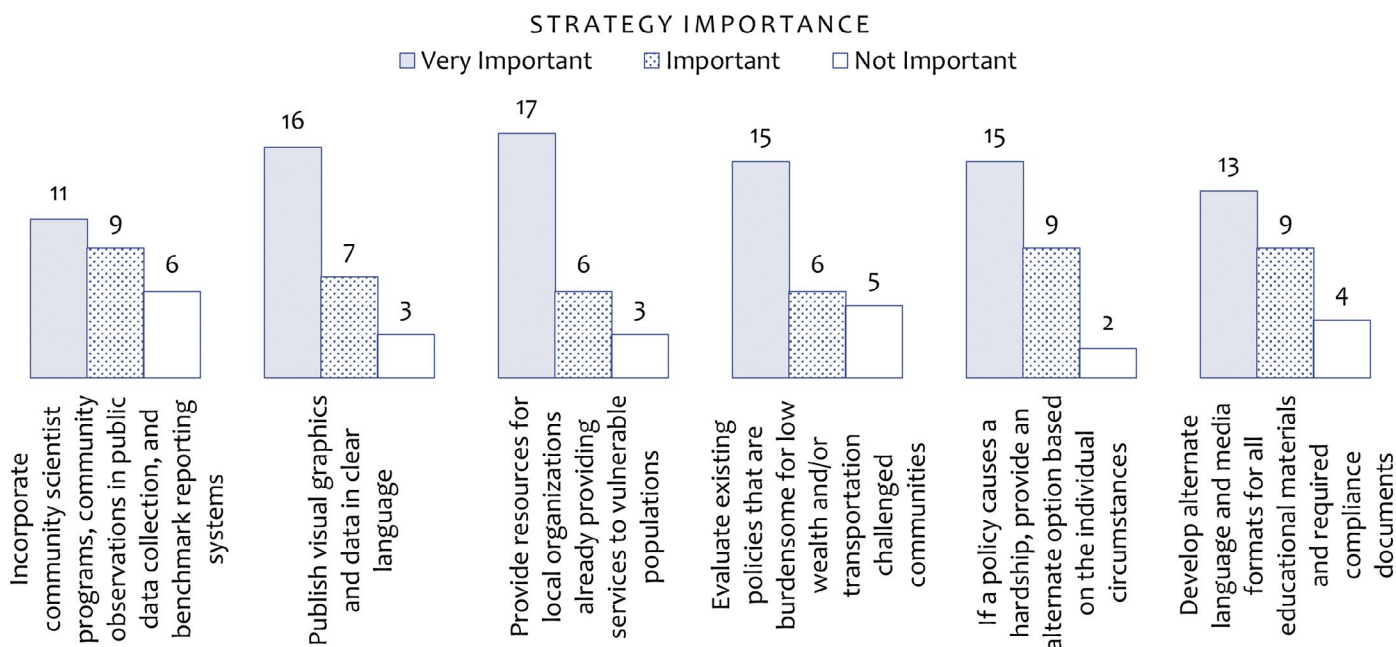
Primary Leader for Strategies

- State/Local Government
- ▨ Community Organization



### COMMENT FIELD SUMMARY

- Need to incorporate local community groups and individual members was reiterated
- Any efforts to implement these need to be prioritized in environmental justice communities beginning with the transition to renewable energy sources and reduced emissions policies





Workforce strategies can include expanding green industries and workforce housing. (Source: Vermont Technical College)



Concerns raised during discussions and surveys related to necessary housing improvements prioritized before energy upgrades.



Some of the state's water sources are not in plain sight and can benefit from public awareness. (Source: City of Scranton)

## ADDITIONAL STRATEGIES

Each online survey provided areas for respondents to use an 'other' text box and there was an entire survey that was a free-form structure. Each of these was reviewed and as a result, additional strategy categories and strategies were identified.

- Workforce: Inventory vacant property and build local workforce for green infrastructure improvements
- Agriculture: Special outreach efforts and methods need to be established for rural and agricultural properties
- Expand biomass energy generation and geothermal
- Prohibit/regulate RVs and ATVs
- Develop cooperative network with academic institutions

## GENERAL STATEMENTS/OBSERVATIONS FROM COMMENTS:

The comments indicated some recurring concerns as well as supporting context.

- There is conflicting data in support of, or opposed to, electric vehicles namely due to lithium battery manufacturing that requires imports from China; and, that the electricity grid as a whole relies on natural gas or coal and will only be expanded with more electric vehicles.
- Education needs to lead any type of change that affects cultural norms and program efforts must take this into consideration at the forefront.
- Many people are facing high levels of personal crisis that will be prioritized before concerns about climate change.
- Strong opinions exist on both sides between government enforcement and policy mandates and the preference for incentives and personal choice.
- Political influence has distinguishable impacts on how money is spent and where regardless of scientific data.
- In some cases the need for action has not been sufficiently demonstrated.
- Existing resources for data, previous studies, and current laws need to be implemented and enforced before new programs are developed.
- Waste and recycling solutions should be within proximity of the producer.

## ONLINE SURVEY FEEDBACK

Comments also captured views about the survey format and content. These noted what was missing and what can be improved.

- Some questions rely on a background of scientific information and encourage perception that the survey is aimed to scientists.
- Sustainable disposal of waste needs to be rewritten to improve clarity and reduce jargon.
- Responses should allow users to rank the options instead of requiring one single choice.
- Demonstrate that the survey responses represent EJ communities.
- Water supply issues are not addressed.
- Rephrase wording for “marginal” crop lands.

Note: All materials from the online survey were provided to DEP for future reference.



*Food waste programs should be accessible and explained in clear terms. (Source: US EPA)*



# 4 MOVING FORWARD

## NEXT STEPS

1. Share report for community feedback
2. Prioritize short term strategies for implementation with community based organizations
3. Develop the next phase of public engagement
4. Focus efforts on transparency and equity

Outreach efforts should be a continuous cycle followed by regular evaluation intervals. From the public perspective, the cycle should be transparent and fluid although there will be reflection points when the information is evaluated and published. In this case, DEP is operating with a timeline looking forward to the 2024 Climate Action Plan. This report was developed to collect information from public outreach related to climate change strategies for environmental justice communities that can benefit that process. In the interim, the Energy Programs Office can use this report to help identify beneficial programs and funding needs of prominent climate change strategies.

Beginning with 92 strategies developed with the DEP team and the previous Climate Action Plan for the online survey, PDP identified the following 48 strategies as those of most interest during the outreach effort (also provided in a table format in the Executive Summary). The strategies are organized into ten categories, which can be used in future public engagement efforts. Additionally, some of the barriers and potential burdens of the strategy categories are captured to advise DEP on the obstacles and resources that may need to be addressed. The online survey responses and general comments suggest that the state government is perceived to be the main actor in the implementation of most of the strategies presented, although in some cases community based organizations were recognized.

The next steps should first incorporate the recommendations collected through this process, which are provided at the end of this section. This includes the focus area suggested for immediate projects and recommendations on how DEP should continue the public engagement process with an equity perspective.

## PROMINENTLY DISCUSSED STRATEGIES

### TRANSPORTATION

1. Increase access for individual transportation options and improve multi-use traffic areas and safe sidewalks that incorporate complete streets models
2. Connect existing and new public transportation options
3. Evaluate capacity and condition of roads and bridges; post clear signage for events that require traffic detours
4. Expand access to internet service to increase telecommuting and educational opportunities for adults and children
5. Increase inter-agency cooperation at state levels, and between state and local levels, to incorporate community transportation priorities

*Barriers and potential burdens that need to be recognized include:*

- Costs for individual investment in electric vehicles is prohibitive
- Transportation schedule changes can disrupt the reliability of public transit and require broad public notice

### PROPERTY/SITE

6. Perform weatherization, energy efficiency upgrades, and seal exterior building elements of homes for owners and tenants
7. Improve relationships between landlords and tenants and enforce existing building maintenance policies
8. Plant trees and native plants
9. Develop training and educational assistance programs to increase trade professionals
10. Replace and/or service roofs, windows, doors; improve insulation and air sealing
11. Fund energy audits and property improvements particularly for rental properties

*Barriers and potential burdens that need to be recognized include:*

- Costs for property improvements especially renewable energy sources are prohibitive for tenants and homeowners
- Older housing stock is prevalent in many areas and may require additional investments prior to energy upgrades
- Reluctance to abandon natural gas for electricity because it is perceived to be more stable than the power grid during emergencies

### FUEL SOURCES

12. Mitigate existing sites and sources of air and water pollution
13. Support physical and policy infrastructure for solar energy sources at a community scale
14. Increase compliance requirements to reduce methane emissions



*Bridges and roadways susceptible to flooding should be evaluated for repairs and have clear signage when inaccessible. (Source: PA DEP)*



*Participants did not favor personal electric vehicles but suggested that they be encouraged for government fleets. (Source: PA DEP)*



*Expanding weatherization programs to include repairs and more providers was specifically recognized. (Source: US Department of Energy)*



*Heat pumps can be energy efficient upgrades but still costly for residents and tenants to install. (Source: US Department of Energy)*



Residential solar installations can be perceived as commercial energy rates and increase utility costs. (Source: US Department of Energy)



Urban green space amenities were identified as a preservation priority.



Participants recognized health concerns of school spaces and their ability to serve as resource centers. (Source: Harrisburg School District)



Where paved surfaces are necessary, permeable materials can still allow water to be absorbed.

15. Locate and cap/cover orphaned and abandoned methane wells  
*Barriers and potential burdens that need to be recognized include:*
  - Potential of financial impacts to property owners and tenants
  - Producing on-site energy may change a tenant or property owner's energy billing rates from residential to commercial
  - Nuclear power is perceived as a dangerous source of energy
  - Perception that an increased use of electricity increases fossil fuel demands

## PUBLIC HEALTH

16. Perform public health services with the cooperation of existing local resources
17. Include food resource strategies and mental health needs
18. Protect urban gardens and greenspace from development
19. Identify plans to address heat and health risks in low-wealth areas
20. Assess needs for additional child care facilities to accommodate families in emergencies
21. Deliver resources to communities during boil-water notices
22. Increase food supply resources through public gardens in needed areas, food pantries, and fresh produce delivery services
23. Address health issues in school facilities and provide space for public resources

*Barriers and potential burdens that need to be recognized include:*

- Requesting or receiving services can cause certain mental health issues that may prevent individual participation
- Existing community organizations need more support for the services they already provide

## INFRASTRUCTURE

24. Improve government stormwater management through natural strategies
25. Identify assets and systems in flood risk areas
26. Update aging stormwater infrastructure to include anticipated long-term needs
27. Actively reduce hard or paved surfaces and transition to natural surfaces
28. Benchmark environmental design principles with new development as a means to increase public and policymaker support

*Barriers and potential burdens that need to be recognized include:*

- Cost burden for local infrastructure improvements may fall to taxpayers in already financially burdened communities
- Provide transparency of public funds to ensure that public dollars are not spent on private property

## NATURAL ENVIRONMENT

29. Increase public ecosystem restoration and conservation efforts
30. Substantiate how natural environmental strategies will impact micro-local communities
31. Improve natural water resource conservation to increase local visibility and priority

*Barriers and potential burdens that need to be recognized include:*

- Political challenges due to limited capacity to affect change on private lands

## STRATEGIC POLICIES

32. Build accountability into all programs and agencies
33. Discourage/limit new development in flood risk areas
34. Prohibit development in high-risk areas
35. Include neighborhood and/or community leaders in strategic planning meetings
36. Increase availability and access to recycling programs

*Barriers and potential burdens that need to be recognized include:*

- Perception that business and industrial entities are not held to the same performance requirements as individuals
- Cost-benefit analyses do not incorporate diverse indicators

## EQUITY

37. Promote comprehensive and accessible programs
38. Provide resources for organizations serving vulnerable populations
39. Publish data in clear language with visual graphics
40. Evaluate existing policies and programs that are burdensome for low wealth/transportation-challenged individuals
41. Create alternate compliance and application requirements for regulatory and incentive programs to reduce barriers
42. Develop citizen, local government, and organization empowerment toolkits to enable existing entities to lead and direct programs
43. Create ombudsmen, community advocate, or other cooperative effort to simplify and unify communications between agencies and environmental justice communities
44. Provide deliverables and tangible benefits to participating citizens and organizations for outreach programs that eases participation commitments

*Barriers and potential burdens that need to be recognized include:*

- Individuals and community based organizations can be overtaxed with participation requests leading to stakeholder fatigue
- Community based organizations need to prioritize their work based on staffing, constituent needs, and budget



*Public infrastructure improvements should include transparent cost benefit analysis. (Source: Pittsburgh Water and Sewer)*



*Policies can be used to limit or discourage development in flood-prone areas. (Source: Yale Climate Connections)*



*Organizations that are already connected with the community should be a first resource. (Source: Portland Emergency Management)*



Community based organizations can provide cooperative opportunities with increased capacity. (Source: Nepa Pan African Coalition)



Agricultural strategies mentioned preservation and internet access. (Source: PA DEP)

## WORKFORCE\*

45. Make an inventory vacant property for potential sites to build green industry and increase employment opportunities
46. Prioritize workforce strategies to address fair labor, energy, housing, salaries, and affordability challenges

Barriers and potential burdens that need to be recognized include:

- None identified

## AGRICULTURE\*

47. Preserve agricultural areas to function as carbon storage
48. Improve internet access in rural areas

Barriers and potential burdens that need to be recognized include:

- Special outreach efforts and methods need to be established for rural and agricultural properties

\* Proposed additional strategy categories from open discussions and online surveys

## FUTURE ENGAGEMENT RECOMMENDATIONS

**What needs to be provided for your constituency to have a voice in this conversation** was asked to help guide future engagement, discussions sessions, or other outreach resulting in the following recommendations from participants:

- Use existing local venues and events to share information such as religious facilities, schools, markets, libraries, community centers, extension offices, and community events to share information, and provide notices of funding and outreach opportunities
- Advertise with social media in tandem with closely networked organizations and faith based leaders, local media, and radio personalities that are already invested and trusted in the community
- Schedule meetings at local and accessible venues at multiple times to encourage diverse and meaningful participation
- Use the languages inherent in a community to share information and deploy messaging from trusted sources
- Provide funding resources, meeting incentives such as food and child care; and commit to sharing results.
- Invite state legislators to meetings
- Include best practices and success stories
- Deploy compensated community hub/local leadership as area ambassadors with communication responsibilities as well as reporting on accountability of promised measures that are tangible
- Focus on rebuilding trust with accountability, accessibility, and meaningful engagement

## PROJECT LIMITATIONS

### DURATION

PDP was engaged in this project for a period of approximately seven months from December 2022 through June 2023 for the purposes of conducting outreach sessions and developing a summary report of findings. During the project planning stage, the PDP and DEP team recognized this scope of work is the beginning of a much larger effort that will be ongoing with multiple state agencies.

### FOCUS

The Energy Programs Office is one of several entities in the state advancing environmental justice policies and programs and specifically focuses on climate change strategies for current and future Climate Action Plans. While some regulatory and compliance policies are addressed as strategy methods, the engagement plan sought to identify preferred incentives, funding, education, and program support that would be most beneficial to those affected by environmental justice issues.

### CONTENT

Climate change is a subject that is rooted in scientific knowledge that is often presented in language that is not readily understandable to the general public. Materials published by the Energy Programs Office describe climate

change in terms of strategies to reduce greenhouse gas emissions and adaptation pathways supported by climate science and data collected from Impacts Assessments. These materials are available in digital and printed media along with other tools to help explain the DEP's goals and opportunities for action. PDP emphasized the of using common language, limiting the use of acronyms, and posing engagement questions in a manner that could elicit a reaction by the participants. The length of open discussion sessions and extent of material to be covered across all of the industry sectors required adapting the content to capture reactions to the most influential issues.

### PARTICIPATION

Working with local partner organizations and other DEP offices, the intent of the open discussions and survey was to gather an audience of representatives familiar with climate change and environmental justice issues in their communities. The nature of conversations and ability to cover multiple topics varied with the size and diversity of participating members. Participants graciously gave of their time and energy to attend meetings while noting suggestions for future outreach efforts. PDP appreciates the opportunity to use this project as a model to continue and improve outreach programs that can take these suggestions and feedback into consideration. Specific recommendations are provided in the



(Source: PA DEP)

# 5 RESOURCES

## RESOURCES INCLUDED:

Citations  
Image Credits  
Local Climate Action Plans  
Online Survey Data

## CITATIONS

Capital Region Water. *Camp Curtin Big Green Block*. <https://capitalregionwater.com/projects/6th-street-forrest-gsi/>

Pennsylvania Department of Environmental Protection. (2021) *Pennsylvania Climate Action Plan 2021*. <https://www.dep.pa.gov/Citizens/climate/Pages/PA-Climate-Action-Plan.aspx>

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## ACCESSIBLE LOCAL CLIMATE ACTION PLANS

Borough of Forest Hills. (2020) *Forest Hills Climate Action Plan*. [https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/ClimateChange/Local\\_Climate\\_Action/Final\\_Forest\\_Hills\\_Climate\\_Action\\_Plan-12-17-2020.pdf](https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/ClimateChange/Local_Climate_Action/Final_Forest_Hills_Climate_Action_Plan-12-17-2020.pdf)

City of Meadville. (2022) *Meadville Climate Action Plan 2022*. [https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/ClimateChange/Local\\_Climate\\_Action/Meadville\\_Climate\\_Action\\_Plan\\_Final.pdf](https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/ClimateChange/Local_Climate_Action/Meadville_Climate_Action_Plan_Final.pdf)

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## ONLINE SURVEY DATA

The PA DEP staff received a copy of the online survey data that was collected for each of the individual surveys as well as all of the free form and additional or ‘other’ comments. This information is omitted from this report due to the volume of pages that would be added.



(Source: PA DEP)

# 6 APPENDIX A: COMMUNITY OPEN DISCUSSION REPORTS

*In April, 2023, seven open discussions were held in various communities in Pennsylvania to develop the strategies and recommendations provided in this report. A summary of participation and the methodology is provided on page five (Section 2) followed by a synthesis of the opinions and ideas shared across all of the sessions.*

Notes from each of the seven open discussions were collected as they were expressed and consolidated into the following pages. The intent was to record a paraphrased summary, not a transcript. Therefore, speaker names and associations remain anonymous

Each of the individual reports is organized in the same manner with the following contents:

- A **word cloud** graphic illustrates the prominence and occurrence of words expressed during the first discussion slide.
- **Community profile** includes information about the attendance, location, and community size and demographics.
- **Participant comments** follow the open discussion slides beginning with a free form conversation about participant priorities based on initial reactions and comments, followed by suggested recommendations for individual-scaled action to industry and government-scaled action.
- **Sidebars** are provided to connect the participant comments with DEP's potential 92 strategies and additionally recommended strategies.
- **What needs to be provided for your constituency to have a voice in this conversation?** The closing comments of the conversation allowed participants to share how the outreach process can be improved and continued.



Words taken from the first discussion slide are incorporated into a word cloud for graphic representation and emphasis.

OPEN DISCUSSION INFORMATION

Hosted at Meadville Public Library  
April 5, 2023 10 Participants

PROFILE

County Crawford  
• Square miles 4.36  
• Population 13,050

Demographics

- Race/ethnicity 88% white, 5.3% Black, 1.4% Asian, Two or more races 5.0, Hispanic or Latino 2.2%
- Veterans 636
- Disability 16.3%
- Median income \$26,579 per cap; \$40,694 household
- Poverty 19.6%
- Number of housing units 5,058; 37.5% are owner-occupied

Source: 2020 Census

MEADVILLE

Meadville is the county seat for Crawford and is within a 60-minute commute to Erie. Traditional industries of logging, agriculture, and iron production were prevalent historically, and grew into a center of multiple industries by the 1950s. Prior to the open discussion, community members identified challenges with flooding, the rental inspection program, lack of air conditioning, and parking needs downtown.

PARTICIPANT COMMENTS

PRIORITIES: WHAT RESONATED, WHAT WAS MISSED?

- Transportation hardships were a major concern including: length of travel time, using public transit for multiple destinations in a trip (70% use transit for childcare, work, and grocery), low efficiencies of boarding the bus when traveling/boarding with groceries; and transit routes connecting to service areas are not regular
- Organizations that provide transportation for child care services experience staff shortages and bus rental/maintenance expenses
- Sidewalks do not connect public housing projects to service centers
- Bicycle transportation is also a challenge because: bike share stations are sporadic and have cost barriers; the topography shifts are difficult; there are safety concerns riding bikes within travel lanes; and there is limited knowledge or practice of road rules for cyclists and motorists



Attendees in the Meadville open discussion included organizational representatives and concerned community members.

## PRIORITIES CONTINUED

- Good bike travel resources include the bike trails and paths in Erie and Allegheny College is an example of managing free bike access
- Local government does not have control, influence, or ability to improve infrastructure where roads intersect with state routes
- Properties designated as floodways and within flood zones reduces funding eligibility
- Electric vehicles and infrastructure for public charging stations would serve more visitor or regional users than the local population due to cost barriers and home improvement requirements that may already experience power outages
- Emergency notification systems are not consistent or available like they are for tornado sirens and emergency planning information is confined to city hall
- Flooding in the Fifth Ward community is a particularly local problem because the area can become inaccessible to any vehicles including emergency vehicles and there is potential for flood waters to reach the power facility which affects more than the immediate neighborhood
- Recognize that almost half the housing stock is pre-1949 and not adequate to accommodate energy retrofits or electric vehicle charging stations due to poor condition of electrical systems from wiring to air conditioning

## TRANSPORTATION STRATEGIES

- Increase access to transportation options
- Connect existing and new public/shared transportation options to retail/commercial/residential centers
- Increase bike and e-bike sharing programs
- Incorporate safe bike/walking/multi-use paths into new and existing development walking strategies
- Inventory pedestrian features and sidewalks to develop improvement plan
- Develop sidewalk safety best practices
- Evaluate capacity and condition of roads and bridges, provide clear alternate traffic flow patterns, post permanent signage
- Ensure emergency public transit schedules are available and broadly communicated

## INFRASTRUCTURE STRATEGIES

- Identify transportation routes subject to flooding or sea level rise
- Build structural improvements
- Update aging stormwater infrastructure to include long-term anticipation of increased precipitation and stormwater

## PROPERTY/SITE STRATEGIES

- Improve access for low to moderate wealth families in existing programs
- Develop a network to connect contractors with needs of residents/property owners
- Plant trees and native plants
- Fund energy retrofits

## FUEL SOURCE STRATEGIES

- Form a solar co-op in neighborhoods to reduce the cost of installing solar
- Develop a model of solar field installations at a community scale
- Increase compliance requirements

**EQUITY STRATEGIES**

Provide resources for local organizations already providing services to vulnerable populations

Evaluate existing policies that are burdensome for low wealth and/or transportation-challenged communities

Increase funding goals for programs targeting low wealth and other socially vulnerable communities

Incorporate community scientist programs, community observations in public data collection, and benchmark reporting systems (using employment opportunities)

Create alternate measures for compliance measures for policies and grant programs that are overly burdensome

**STRATEGIC POLICY STRATEGIES**

Create materials with graphics for flood and building code resources

Include neighborhood and/or community leaders in strategic planning meetings

Incentivize landscape requirements that include vegetation and natural water management resources

**NATURAL ENVIRONMENT STRATEGIES**

Increase green space

**PUBLIC HEALTH STRATEGIES**

Remediate ticks

- Expand program support for weatherization that is inhibited from lack of providers available
- Increase contractors and financial resources for weatherization programs
- Fund large-scale solar grid that is out of reach for municipalities
- Implement equity criteria to prioritize state or other funding programs that expand alternative energy sources to ensure funds get to smaller communities
- Improve grant sources that are difficult to navigate because of the limited programs, application schedules, staff capacity needed to apply and administer the funds which can be improved by allowing grant funds to pay for administration and provide technical support
- Use rigorous GIS analysis to more narrowly identify where the issues are most prominent for environmental justice communities
- Implement previously developed policies and recommendations from best practice management systems

**WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?**

- Encourage property owners to upgrade changes to utility systems
- Incentivize property owners to make improvements
- Increase education and resources for property owners and tenants
- Alter funding programs that limit participation due to grant application schedules

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Increase pocket parks and tree plantings
- Decrease tree removal

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Regulate removal of trees
- Increase pest removal specifically ticks
- Increase capacity for local government to address aging systems and underground streams
- Promote personal responsibility of public or neighborhood spaces for rental and transient population

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Identify and be accountable for pollution such as Erie’s Coke plant that producing unacceptable levels of benzene
- Account for and effectively manage stormwater performance
- Remediate former/abandoned smaller industrial sites like dry cleaners and gas stations that include blighted structures and no accountability
- Energy retrofits are a lesser priority for legacy mom/pop manufacturers that are challenged with supply chain issues
- Conduct outreach and clean-ups using paid staff versus using volunteers

## WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?

- Increase staffing to effectively perform existing responsibilities
- Streamline application processes, increase funding allowances, improve systems to allow departments to cross silos of funding and synergize community goals with larger projects
- Address aging school infrastructure and lack of compliance requirements
- Recognize vulnerabilities with complete assessment of systemic issues to avoid band-aid problem solving
- Ensure Environmental Justice positions are incorporated into planning systems and grant requirements

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Hold meetings in close proximity that accommodate work schedules to increase direct representation by communities affected by Environmental Justice issues
- Meet people where they are (see HOPE Meadville initiative, Facebook.)
- Offer a toolkit for sharing information with and without DEP leadership
- Build trust first and foremost
- Incentivize community ambassadors by providing financial or other capacity-building assistance to allow existing programs to do their work and contribute directly to local problems

## OTHER STRATEGIES RECOMMENDED

- Develop policy and program to remediate contaminated sites for small industries (non-fuel source sites)
- Identify compliance and infrastructure investments for school facilities
- Develop inter-agency coordination systems that include public access
- Increase staff resources for state agencies
- Develop communication toolkits to empower existing organizations



An aerial image of an industrial field in Erie. (Courtesy dep.pa.gov)





Attendees in the Pittsburgh/Forest Hills open discussion presented issues with local and regional concerns.

## PRIORITIES CONTINUED

- Renewable energy adaptations to private homes have cost and access obstacles limiting voluntary participation
- Fuel production may occur in close proximity but the residents do not benefit with energy upgrades to natural gas (for example)
- Flooding is the result of large-scale development that does not use responsible forestry management practices and is not required to improve area roads
- Emergency planning measures are hindered by large-scale sites
- Abandoned mines and wells need to be mitigated
- Resilience efforts must address the community at a comprehensive scale combining efforts of volunteer fire with mutual aid programs
- Equity issues include language barriers that make environmental opportunities vague or unclear, like urban farming
- Key actions need to have funding, training, preparedness, and accountability measures fully integrated

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Tenants can embrace the small changes and teach, support, and mentor others
- Property owners can be accountable for quality assurance of any installations and maintenance, provide truly affordable housing, increase capacity for tenants to participate without cost burdens, and ensure their property managers are accessible

## HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?

- Systemic responsibility needs to be increased first

## TRANSPORTATION STRATEGIES

- Increase access to transportation options
- Connect existing and new public/shared transportation options to retail/commercial/residential centers
- Develop sidewalk safety best practices
- Incorporate safe bike/walking/multi-use paths into new and existing development
- Expand access to internet service and dependable service

## STRATEGIC POLICY STRATEGIES

- Increase requirements to fund or build affordable housing, schools, healthcare facilities, and transportation systems with new development
- Include neighborhood and/or community leaders in strategic planning meetings and communicate throughout all phases
- Incentivize landscape requirements that include vegetation and natural water management resources
- Transition vacant lands for reclamation, renewable energy, or conservation; including community priorities
- Create graphic materials for flood and building code resources

## PROPERTY/SITE STRATEGIES

- Require electric, on-site renewable energy, and minimum standards in new construction (including affordable housing and transfers)
- Provide funding to replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling
- Replace/service roofs, windows/doors; improve insulation and air sealing
- Replace/service appliances and HVAC systems
- Install new energy efficient equipment like smart thermostats, energy efficient lighting and HVAC systems, passive heating, waste heat recovery
- Weatherize homes and buildings to protect from elements
- Improve access for low to moderate wealth families in existing programs

**EQUITY STRATEGIES**

- Increase funding goals for programs targeting low wealth and other socially vulnerable communities
- Publish visual graphics and data using clear language
- Develop alternate language and media formats for all educational materials and required compliance documents
- Provide resources for local organizations already providing services to vulnerable populations
- Increase funding goals for programs targeting low wealth and other socially vulnerable communities
- Evaluate existing policies that are burdensome for low wealth and/or transportation-challenged communities

**INFRASTRUCTURE STRATEGIES**

- Improve on-site storm water management practices and regulations (public and private)

**FUEL SOURCE STRATEGIES**

- Locate and cap/cover orphaned and abandoned methane wells and publicize immediate health benefits and long-term climate impacts

**PUBLIC HEALTH STRATEGIES**

- Coordinate with neighborhood and/or community organizations to distribute aid
- Ensure information and supply distribution centers are well advertised and accessible
- Equip existing public facilities (e.g. libraries, schools, community centers) for short term conversion to relief/distribution/information centers

**NATURAL ENVIRONMENT STRATEGIES**

- Establish a statewide monitoring and research network to record conditions integrated with the business and industry sector as well as all state agencies for transparent reporting on climate change initiatives

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Regulatory: Regulate rental housing requirements, readdress affordable housing threshold, increase oversight of weatherization programs to improve quality of work, and allow zoning for accessory dwelling units
- Planning and communications: Implement a comprehensive plan for energy retrofits with a completely renewable system that can sustain its lifecycle, direct developers to property prioritized for re-use and away from property prioritized for preservation, build and earn trust, allow safe space for conversation, and offer training or make local codes user-friendly
- Access: Decrease roadblocks for re-development of large vacant sites to benefit community organizations or community-driven development, increase community forums, distribute equal opportunity for educational programs, guide new residents and those unfamiliar with participation opportunities, and collaborate with other communities

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Reduce amount of waste from drilling activities that goes to the landfill
- Relinquish grandfathered rights and adhere to modern standards
- Produce open access resources describing the cause and effect of negative impacts of time in comparison with current operations
- Reinvest in neighboring communities with actions that are meaningful and broadly applied
- Respect lower wealth communities by giving back
- Engage in proactive solutions instead of reactionary problem-solving
- Remove greenwashing from communication practices and programs

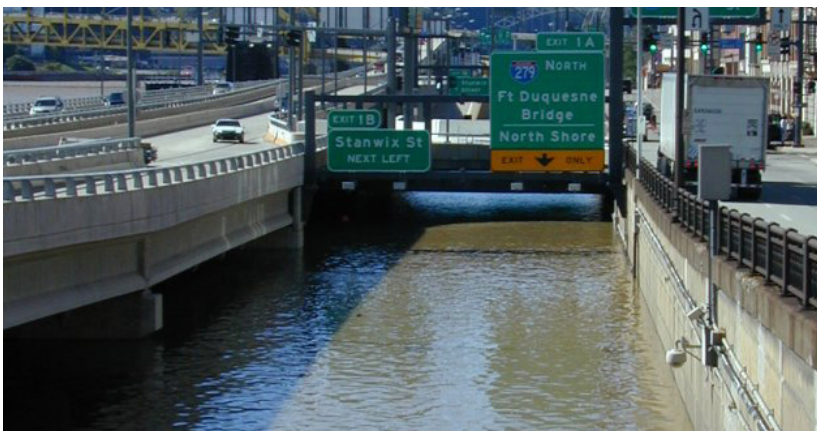
**WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?**

- Prioritize community's best interests above outside pressures
- Modify grant programs with grant accessibility centers; removing barriers including the volume of an application package, level of competition across municipalities, and grant caps; award larger projects submitted by collaborating communities; allow staff time and in-kind support for match requirements
- Provide municipal support for modifying local ordinances and managing public meetings
- Regulate landfills, drilling waste, and stop permitting polluting sources
- Integrate air quality with climate change and evaluate whether regulations should change given higher impacts of air pollution
- Empower regulators to mandate compliance and accountable results
- Re-establish regional planning commissions
- Build capacity for local organizations including staff, grant writers, managers, and access to information
- Leverage strategies with existing research and data from other states to expand opportunities and programs

- Prioritize short-term goals to include immediate local health benefits from capping abandoned wells and include this in cost-benefit analyses for long-term climate benefits
- Mitigate the cause and effect of areas that transition from low wealth, to blight, and then to a place of gentrification
- Include health impacts of environmental infrastructure in project evaluations
- Empower individuals to help themselves and provide stopgap support to preserve existing infrastructure
- Develop enabling legislation to allow municipalities to mandate building energy transition when property is transferred and inventory pre-emption laws that need to change to allow localities to deploy best practices
- Mandate climate change action for all state agencies including transportation which can reduce speed limits; increase bus shelters and safe walkways on bus routes (e.g. Brinton Road, Yost Blvd, and Braddock Road); and implement complete streets
- Prepare schools for use as resource centers and adapt existing infrastructure and manufacturing facilities

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Convenient meeting locations and schedule of meetings
- Use existing programs to the best of their abilities
- Rebuild trust
- Establish recognized area ambassadors that will have communication responsibilities and accountability on tangible, promised measures
- Provide comprehensive and prioritized service improvements
- Increase people that directly communicate with DEP to make processes for participation and education easier
- Increase opportunity for public hearings on infrastructure and adopt the community's recommendations
- Provide a deliverable to the community



Hurricanes have left flooding rains. (US Weather Service)

## OTHER STRATEGIES RECOMMENDED

Increase inter-agency cooperation between state and local government for transit improvements

Require adjacent fuel source centers to provide energy source to host community and other community benefits

Increase compliance and regulatory standards for large development sites including community development priorities

Require accountability for all programs and agencies

Regulate landlord/tenant performance requirements

Fund programs with lifecycle sustainability

Legislate or prohibit drilling waste from landfill sites and cease permitting pollution sources

Modify grant programs to increase enrollment, ease accessibility, improve management, prioritize multi-community benefit projects, ease hard cash match requirements

Support municipalities with policy and public meeting management

Re-establish planning regional commissions

Leverage data from model plans, data sources, and other state or national publications

Evaluate project development and implementation that mitigates gentrification



Words taken from the first discussion slide are incorporated into a word cloud for graphic representation and emphasis.

**OPEN DISCUSSION INFORMATION**

Hosted at Scranton City Hall

April 10, 2023                      21 Participants

**PROFILE**

**County**                                      Lackawanna

- Square miles                                      25.31
- Population    76,328

**Demographics**

- Race/ethnicity 69.9% white, 5.6% Black, 5.0% Asian, 8.0% Two or more races, 16.0% Hispanic/Latino
- Veterans 3,949
- Disability 13.2%
- Median income \$44,161
- Poverty 20.1%
- Number of housing units (unknown)

Source: 2020 Census

**SCRANTON**

Scranton is the county seat for Lackawanna and is the largest municipality in the county. Early industry in the area included anthracite coal mining, iron manufacturing for railroad infrastructure, and textile mills situated along the Lackawanna River. Following economic decline with oil production elsewhere, mines closed by the mid 1950s. The city now promotes innovation through technology, education, and the arts. Prior to the open discussion, community members identified challenges with heat, flooding, and stormwater.

**PARTICIPANT COMMENTS**

**PRIORITIES: WHAT RESONATED, WHAT WAS MISSED?**

- Consumer energy labels may only be available regionally or from privately from utility companies
- Stormwater management should be incentivized through zoning and not mandated with taxpayer burden
- Comfort and familiarity for relationships between agencies, regulators, and residents
- Relief centers that are smaller and accessible in a space embedded in a community
- Funding access for smaller communities with cooperation among regional areas



Attendees in the Scranton open discussion shared constructive approaches to address climate change issues for environmental justice areas.

## PRIORITIES CONTINUED

- Funding to implement 3-year plan on a community level to reach sustainable community designation
- Transit stations at major interstate intersections
- Waste management programs for household hazardous waste programs and place for collecting common home chemicals
- Impact fees for highest polluters
- Include more opportunities for people to be in the room and part of the conversations (hub model, public defender model)
- Separate DEP roles as regulator and defender
- Sustainable transportation without mandating personal vehicle purchase
- Solar pricing that is affordable
- Transportation access connecting good jobs to encourage younger residents to stay
- Regulations and support for natural water sources
- Energy upgrade resources for tenants
- Accessibility of information
- Identify current funding and spending programs to help the community influence local investments that achieves their needs
- Reduce crime using environmental design

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Encourage tenants to identify energy gaps and appliance performance issues
- Incentivize property owners to supply energy efficient appliances, consider needs for aging in place, support for low-income rental units, be accessible and open to inspections, participate in energy audits, and ensure that scale and age of rental properties adequately keeps up
- Support efforts to include tax incentives for property owners, regular code enforcement inspections, fines for lack of compliance and accessibility, and increase financial assistance for energy audits

## PROPERTY/SITE STRATEGIES

Mandate public notice/label of building energy score as part of selling transactions and support with provider network

Install solar power sources with funded programs

Increase electric, on-site renewable energy, and minimum standards in existing buildings especially for tenant access

Replace/service roofs, windows/doors; improve insulation and air sealing

Replace/service appliances and HVAC systems

Install new energy efficient equipment like smart thermostats, energy efficient lighting and HVAC systems, passive heating, waste heat recovery

Weatherize homes and buildings to protect from elements

Replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling

Increase capacity to enforce the most current building code particularly for rental properties

Develop training and educational assistance programs to increase trade professionals

Develop a network to connect contractors with needs of residents/property owners

## STRATEGIC POLICY STRATEGIES

Incentivize landscape requirements that include vegetation and natural water management resources

Increase availability, access, and funding for recycling programs, household waste collection of hazardous items, and neighborhood clean up events

Include neighborhood and/or community leaders in strategic planning meetings as in a public defender or hub model

Transition vacant or previously developed lands for reclamation, renewable energy, or conservation that discourages future brownfields and is based on community priorities

Eliminate barriers to urban gardening and farming and unify with composting service

**PUBLIC HEALTH STRATEGIES**

Equip existing public facilities (e.g. libraries, schools, community centers) for short term conversion to relief/distribution/information centers

Coordinate with neighborhood and/or community organizations to distribute what is needed

Ensure information and supply distribution centers are well advertised and accessible

**TRANSPORTATION STRATEGIES**

Connect existing and new public/shared transportation options to retail/commercial/residential centers and major intersections

Increase access to transportation options prioritizing young professional workforce

Develop sidewalk safety best practices

Inventory pedestrian features and sidewalks to develop improvement plan

**FUEL SOURCE STRATEGIES**

Increase compliance requirements to reduce uncaptured methane emissions and other pollutants with impact fees

Create model legislation to enable and promote community solar installations and prohibit home owner association solar bans

Locate and cap/cover orphaned and abandoned methane wells

**NATURAL ENVIRONMENT STRATEGY**

Establish a statewide monitoring and research network to record conditions integrated with the business and industry sector as well as all state agencies

Increase public ecosystem restoration and conservation abilities particularly for natural water resources and watersheds

**EQUITY STRATEGIES**

Publish visual graphics and data using clear language

Develop alternate language and media formats for all educational materials and required compliance documents

Provide resources for local organizations already providing services to vulnerable populations

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Solar acceptance by home owner associations
- Provide garbage collection sites for neighborhood clean-ups
- Sidewalk construction, safety features, and maintenance funds that improve walkability
- Vacant lot mitigation through cleaning and maintenance, title clearing, and using land banks to acquire abandoned/vacant property and restore to viable use
- Home improvement funds for owners and tenants matched with grant programs
- Create more block improvement programs with neighbor cooperation
- Composting and community garden efforts that are unified and incentivizing participation

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Increase vocational training and living wages
- Composting on a community-wide scale with increased participation
- Staff any service programs with stable and consistent employees to increase personal relationships and limit turnover
- Standardize recycling programs across public and private recycling providers and collection methods
- Funding for waste management
- Distinguish community’s identity from the fossil fuel industry
- Increase recreational facility access
- Implement community hubs: use places and providers that are integrated within the community to address questions and provide information
- Regulations that prevent future brownfields
- Empower citizens and increase access to change local government
- Populate planning commission authorities with persons experienced in climate change and environmental justice
- Mandate site remediation before allowing development in EJ areas, including air quality from industry, wells, landfills, soil, water, etc.
- Mitigate acid mine drainage
- Landfills and mines with pass/fail grades that require transparency, accountability, compliance with permitting with penalties of costs, and/or impact fees
- Business/industry compliance must be valued as much with as individuals
- Permit evaluations for DEP are underfunded, which can be improved with third party reviewer programs and connecting with legislators to address funding, employment, and compliance

## WHAT IS THE RESPONSIBILITY OF INDUSTRY?

- Disclose conflicts of interests that may exist with property owners, representatives
- Assist with access to land owners for abandoned mines, creative resources to mitigate mines, and connect with those responsible
- Support mandated action or access to abandoned mines on private lands
- Consolidate or coordinate waste haulers
- Pay for pollution directly to utility customers
- Conduct outreach and connect within the community where they are located or where they are most impactful

## WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?

- Require transparency in all agency programs
- Distribute information and notifications beyond newspapers
- Communicate through existing area service providers and not large institutions or universities
- Educate consumers on how to purchase renewable energy resources
- Encourage and host more climate discussion with local people and inter-agencies sessions versus penalty management
- Fund programs that remove barriers and an agency-silo approach, reduce competition, and advertise broadly, and include management support to increase cooperation across agencies and maximize community benefit
- Host renewable energy summits to educate all members of society to become energy leaders
- Require agency sub-departments to address climate change issues within their comprehensive planning processes
- Resolve project conflicts with local zoning standards
- Increase training for local government officials and volunteer boards

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Hold meetings in evening and alternate locations
- Use community hubs, regions, and local leadership
- Fund the centers/people/equipment/materials = ambassador
- Fund grant finders to connect centers with resources/technical assistance for local areas/regions
- Use social media in tandem with closely networked organizations
- Access stakeholder groups and include their participation through translated materials

Increase funding for programs targeting low wealth and other socially vulnerable communities

## OTHER STRATEGIES RECOMMENDED

- Build relationships with local communities through intentional and meaningful practice
- Prioritize funding for smaller communities with partnerships between municipalities and industry
- Fund Sustainable Communities program
- Separate DEP responsibilities of regulatory compliance and policy developer
- Improve transportation without electric vehicle reliance
- Coordinate development projects with environmental design principles and benchmark crime reduction
- Fund energy audits and property improvements particularly for rental properties
- Standardize waste and recycling collection
- Separate alignment of communities with fuel industry
- Construct recreational facilities or increase access
- Develop citizen empowerment programs
- Mitigate polluted property before new development is permitted
- Impose impact fees and public evaluation notices for landfills and mines that can fund private utility customers
- Prioritize business and industry compliance before individual compliance
- Require accountability for all programs and agencies
- Increase inter-agency cooperation between state and local government for transit improvements



Words taken from the first discussion slide are incorporated into a word cloud for graphic representation and emphasis.

**OPEN DISCUSSION INFORMATION**

Hosted at Berks Nature Center

April 11, 2023                      15 Participants

**PROFILE**

- County**                                      Berks
- Square miles                                      9.84
  - Population    95,112

**Demographics**

- Race/ethnicity 43% white, 12.6% Black, 17.2% Two or more races, 66.5% Hispanic
- Veterans 2,799
- Disability 16.4%
- Median income \$38,378
- Poverty 29.3%
- Number of housing units (not available)

Source: 2020 Census

**READING**

Reading is the county seat and was influenced by the local iron industry and canal and railroad construction. One specific railroad, the Reading Railroad, yielded much construction and employment for well over 100 years. Later industries included automobile and motorcycling facilities. Medical employers and modern manufacturing supplanted the city’s traditional industrial economy.

**PARTICIPANT COMMENTS**

**PRIORITIES: WHAT RESONATED, WHAT WAS MISSED?**

- Transportation needs more bus drivers and increased access to buses and improved walkways and bike lanes
- Home are primarily heated with oil which increases challenges for public health/asthma and potential danger of fire explosion leading to a local priority for 100% renewable energy by 2050
- Funding is not available to transition to renewable energy sources for residents
- Solar is a challenge for properties that are not owner-occupied
- Community solar option is preferred with clear source of funding and eligibility requirements
- Legislative changes to remove barriers that limit or prohibit local government implementation of renewable energy goals



The DEP Office of Environmental Justice gave introductory remarks at each session to convey work that is planned to continue.

## PRIORITIES CONTINUED

- Project management, including design and implementation assistance
- Natural solutions are a priority
- Industry coordination with a facilitated/open process
- Agricultural resource preservation to store carbon
- Stormwater impacts education and incentivizes
- Water resource programs to increase visibility and importance
- Water utility management with fees based on usage and impervious surfaces
- Plant trees to absorb heat and water
- Publicize actions for individuals
- Leadership beyond government to build support within the community
- Vector borne diseases and invasive species remediation

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Increase awareness for tenants and property owners regarding lawncare methods and avoiding chemical pesticides
- Encourage property owners to provide recycling mechanism and reduce grass lawns

## TRANSPORTATION STRATEGIES

Increase access to transportation options, bus stops, and bus drivers

Develop sidewalk safety best practices

## PROPERTY/SITE STRATEGIES

Replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling

Improve access for low to moderate wealth families in existing programs especially tenants

Increase electric, on-site renewable energy, and minimum standards in existing buildings especially rental properties

Plant trees and native plants

Develop guidance for residential property owners to use in determining renewable energy options

Increase capacity to enforce the most current building and housing code

## FUEL SOURCE STRATEGIES

Develop a model of solar field installations at a community scale

Form a solar co-op in neighborhoods to reduce the cost of installing solar

Create model legislation to enable and promote community solar installations

Support efforts to mitigate/ minimize mine drainage and control methane leaks from abandoned mines

Increase compliance requirements to reduce uncaptured methane emissions

Locate and cap/cover orphaned and abandoned methane wells

**EQUITY**

Provide resources for local organizations already providing services to vulnerable populations

Increase funding goals for programs targeting low wealth and other socially vulnerable communities

Evaluate existing policies (i.e. grant programs) that are burdensome for low wealth and/or transportation-challenged communities

Publish visual graphics and data using clear language

Develop alternate language and media formats for all educational materials and required compliance documents

**STRATEGIC POLICY STRATEGIES**

Incentivize landscape requirements that include vegetation and natural water management resources

Increase availability and access to recycling programs community gardens, neighborhood clean-ups, and related public education opportunities

Increase waterway buffer requirements

Prohibit development in high-risk areas

**INFRASTRUCTURE STRATEGIES**

Improve on-site storm water management practices, regulations, and education (public and private)

Actively reduce hard or paved surfaces and transition to natural surfaces

**NATURAL ENVIRONMENT STRATEGIES**

Increase public ecosystem restoration, conservation, and education abilities particularly for natural water resources and watersheds

**PUBLIC HEALTH**

Remediate vector borne diseases with respect to ticks

- Provide education about alternative heating and cooling systems and advantages/disadvantages of natural gas

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Share recycling opportunities, conduct neighborhood clean-ups, and promote adopt-a-block programs and community gardens
- Provide education about recycling and proper disposal of cigarettes, electronics, and diapers
- Avoid smoking indoors in multi-family units
- Develop fresh-food produce delivery services/opportunities as a public program
- Expand edible environments with trees and permaculture together
- Plant trees with root systems compatible to street environment
- Establish nurseries for state road projects

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Require maintenance and property inspections with accountable entities
- Enforce existing codes
- Resolve gap between housing vouchers and low supply of eligible properties
- Enforce minimum housing standards for all rental properties not just Section 8/HUD
- Provide on-site solutions for waste management
- Educate residents on local water sources and distribution

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Support clean-ups for lead and abandoned industrial sites/wells/mines
- Comply with clean-up and discharge requirements
- Provide more incentives to reduce energy use
- Encourage stewardship of the environment through responsibility, accountability, and respect for neighbors

**WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?**

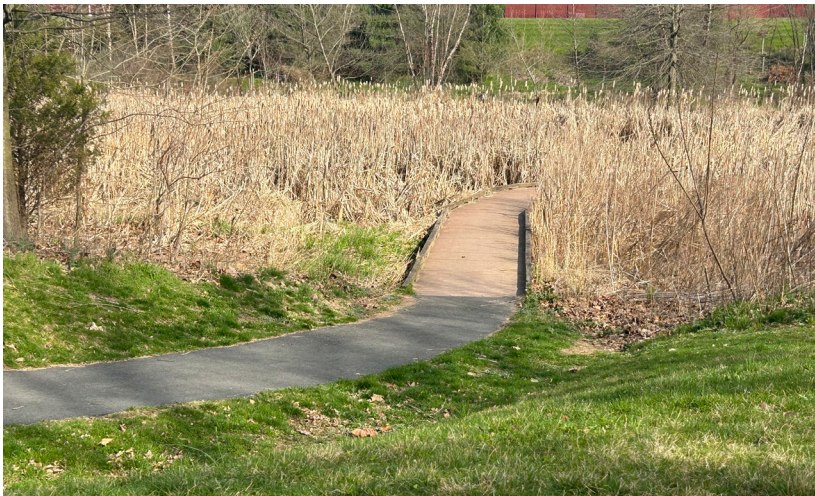
- Support public works and public water utility support mechanisms to avoid private entities from purchasing the local utility
- Increase transparency, community engagement, and education to local municipalities
- Incentivize natural infrastructure for local communities
- Revise water affordability index
- Revise cost-benefit analysis to include diversity indicators
- Protect riparian buffers from development and increase buffer sizes
- Promote conservation reserve program
- Reduce barriers between policy, permitting, enforcement staff/entities

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Provide materials in multiple languages
- Schedule meetings that do not conflict with the workday
- Seek creative outreach process and sources
- Focus on community residents not just community representatives
- Host meetings in the places they live
- Identify clear deliverable/result of their participation
- Participate at churches, schools, market/community events, Penn State Extension programs
- Provide food
- Share information including accessible resources at libraries
- Find community leaders and identify partners with larger voice and awareness opportunities
- Connect with local radio station and find cross cultural representation

## OTHER STRATEGIES RECOMMENDED

- Fund energy transition programs
- Modify grant programs to reduce competition and allow more opportunities for smaller communities
- Preserve agricultural areas to function as carbon storage
- Adopt water utility rates that account for usage and impervious surfaces
- Publish and promote educational materials about individual actions
- Promote community leadership
- Disincentivize grass lawn cover
- Prohibit/disincentivize smoking in multi-family housing
- Develop fresh food produce delivery services
- Establish nurseries for state road improvements
- Incentives for fuel industries to reduce consumption
- Require fuel industries to contribute transparent stewardship to environment and communities
- Provide investments in public water utilities and revision of water affordability index
- Require accountability for all programs and state and local agencies
- Prioritize natural infrastructure mechanisms
- Modify cost-benefit analysis to incorporate diverse indicators



*A natural watershed is restored after the damaged Angelica Dam was removed.*



## PRIORITIES CONTINUED

- within communities outside department offices
- Refer to the Local Climate Action Plan for example solutions
- Encourage personal responsibility to pursue opportunities, education, and open communication
- Collect data for health impacts on EJ communities
- Use trusted community partners to connect technology and government policies
- Share information within community through in-person meetings/open discussions/relationships
- Recognize electric vehicle alternatives include walkability, public transit, increased access to public transit everywhere
- Prioritize public transit infrastructure investments based on traffic, injury incidents, safety of connecting sites
- Coordinate state agencies and local transportation officials to enable more transit flexibility within cities
- Achieve safety through varied approaches
- Prioritize electric vehicles prioritized for local and state governments
- Provide unified, relatable, and impactful communication strategies across agencies while avoiding unnecessary duplication of efforts
- Use messaging that show how climate change affects everyone, regardless of social upbringing and localized areas
- Remove boundaries for access to assistance
- Develop messaging for children to grow energy and enthusiasm to affect change in adults
- Establish safety as a requirement in all program changes
- Recognize gun violence is a part of environmental justice
- Compile best practices for easy access and distribution
- Provide new sustainable housing
- Recognize environmental injustice is exacerbating other issues

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Educate tenants on the benefits of unplugging unused appliances and digital gadgets
- Encourage property owners to educate tenants on energy efficiency methods, effects of lead, benefits of weatherization
- Publish more information on how to take advantage of rebates and programs to improve property, reduce cost and time burden of upgrades to tenants, ensure tenants can remain in their homes, and provide proactive responses to environmental justice
- Support initiatives including clean sweeping programs, methods to implement weatherization needed before energy upgrades, and ability

## TRANSPORTATION STRATEGIES

- Increase access to transportation options and electric vehicle opportunities
- Inventory pedestrian features and sidewalks to develop improvement plan
- Incorporate safe bike/walking/multi-use paths into new and existing development
- Develop new or convert existing public transportation vehicles to electric power

## PROPERTY/SITE STRATEGIES

- Increase capacity to enforce the most current building and housing code, and preservation
- Require electric, on-site renewable energy, and minimum standards in new construction (including affordable housing projects)
- Improve access for low to moderate wealth families in existing programs
- Promote financial benefits of energy management with social media campaigns
- Develop guidance for residential property owners to use in determining renewable energy options
- Reduce hard pavement and other solid surface areas
- Plant trees and native plants

## STRATEGIC POLICY STRATEGIES

- Regulate food and business waste
- Include neighborhood and/or community leaders in strategic planning meetings
- Increase requirements to fund or build affordable housing, schools, healthcare facilities, and transportation systems with new development
- Transition vacant lands prioritized by communities and environmental justice areas

**EQUITY**

Increase funding goals for programs targeting low wealth and other socially vulnerable communities

Evaluate existing policies that are burdensome for low wealth and/or transportation-challenged communities

Create alternate measures for compliance measures for policies that are overly burdensome

Provide resources for local organizations already providing services to vulnerable populations

Publish visual graphics and data using clear language

Develop alternate language and media formats for all educational materials and required compliance documents

**NATURAL ENVIRONMENT STRATEGIES**

Establish a statewide monitoring and research network to record conditions integrated with the business and industry sector as well as all state agencies for transparent reporting on climate change initiatives

**PUBLIC HEALTH**

Coordinate with neighborhood and/or community organizations to distribute what is needed

**INFRASTRUCTURE**

Improve on-site storm water management practices with complete streets principles

**FUEL SOURCE STRATEGIES**

Increase compliance requirements with impact fees

to reduce barriers for property improvements and preservation

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Identify vacant lots and remedy vacant lots in EJ areas
- Use complete streets models that reduce paved surfaces, improve connectivity, ADA access, tree coverage, reduce impervious surfaces, provide alternate transportation options
- Promote wildflower seeded areas versus maintaining lawns; particularly in vacant/abandoned properties
- Identify community needs and connect strategies to those areas of EJ impact
- Provide municipal resources for community gardens and make it accessible to the community groups that are interested
- Communicate with community leaders
- Improve bike routes with respect to parking and green spaces

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Work with local community organizations
- Demand accountability
- Vote and participate in meetings to hold leaders accountable at all times not just for problem-solving
- Host regional meetings across community boundaries to increase sharing and cooperative opportunities
- Remove complications, barriers, restructure programs to facilitate easier use and application
- Reduce police overtime to create funds for community safety

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Use surplus food to better supply food pantries, build systems to connect industry to community services
- Affordable housing that improves lives of workforce
- Provide examples of what sustainability looks like; provide the mechanism and support
- Require responsibility to basic requirements like meeting tax responsibilities

**WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?**

- Set larger example, remove silo method of operations, lead collaboration efforts
- Ensure there are ADA sidewalks and use community block grants to make the improvements
- Remove toxins from drinking water, provide communities with resources to make informed decisions
- Identify direct and indirect consequences of “improvement programs”
- Unify voices of state agencies, look at examples of other cities/states

- Invest in larger fleet of electric vehicles
- Hold manufacturers and auto industry accountable and increase compliance
- Develop legislation and programs that mandate prevention measures for industries using a fee or tax to implement the program
- Market brownfields for solar arrays instead of farmlands
- Require utility agency policies for accountability, maintenance, and acquisition to mitigate damage caused by utility providers
- Implement 5-year plan to cap abandoned wells, clean-up mine lands, inventory points, and acid mine drainage
- Adopt legislation to prohibit gifts for political elections at all levels
- Develop benchmarks to identify and mitigate gentrification
- Resolve conflicts and ambiguity in wetland zoning and development policies so they are interpreted accordingly at the local level

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Review existing programs of community organizations and schedule accordingly
- Research missions of local communities to find partners
- Deploy messaging from a trusted source
- Show best practices and success stories
- Include grant program incentives to increase participation
- Include funding sources for community engagement
- Promote the use of environmental lobbyists
- Meet people in their community
- Ensure community members have information to be a meaningful participant and provide pathways for their involvement
- Recognize that environmental justice is directly tied to economic justice
- Recognize climate change policies should not have a cost burden on communities and individuals



Buildings may need weatherization improvements more than energy upgrades.

## OTHER STRATEGIES RECOMMENDED

- Equity benchmarking in all areas and programs
- Review, evaluate, and implement successes of infrastructure program (CRW Big Green Block), University of Harrisburg data, Local Climate Action Plan
- Substantiate natural environment strategies with education and identification of micro-local impacts
- Publish and promote educational materials about individual actions
- Inventory public transit routes and benchmark safety data for route and connecting sites
- Increase inter-agency cooperation between state and local government for transit improvements including safety improvements
- Focus electric vehicle benefits for state and local agencies
- Require accountability for all programs and state and local agencies
- Unify communications across agencies, focus on climate change impacts to everyone, and develop specialized messaging for younger audiences
- Modify grant programs to increase enrollment and ease accessibility
- Identify public safety benchmarking in climate change strategies including gun violence
- Adopt complete street policies
- Support surplus food programs to replenish food pantries
- Prioritize workforce benefits
- Develop clean water programs and expand water resources for community decision-making
- Evaluate potential for unintended consequences





Individuals and organization representatives shared their priorities.

## PRIORITIES CONTINUED

- Host information hearing for Recreation and Tourism to include economics
- Workforce development is a strategy category
- Integration of fair labor sources, energy, housing, and affordability challenges
- Recognized organizations as equal participants in developing the strategies/policies/plans (see partnering versus transparency)
- Increase resources that empower community organizations to perform their mission and expand their reach with leadership opportunities, financial assistance, easy access to information and financial assistance, staffing support, and removing barriers like matching grant funds requirements
- Convert Green Lane to a flood control area (speaker clarification not provided to confirm exact location reference)

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Encourage tenants to change to LED bulbs, change habits to reduce single use containers and plastics, participate in educational opportunities
- Recognize individual choice is not a systemic solution, recognize that businesses and industry promote propaganda that individuals are responsible to shift attention away from their responsibilities
- Encourage property owners to request energy audit, seek free/low cost improvements, and manage building envelope and systems
- Conduct programs with proportionate impact: identify community members with most power to affect change, scale solutions size and financial capacity, connect Inflation Reduction Act with energy audit needs, regulate use of oversized and plastic packaging in food and retail sources, prioritize property owner incentives, prohibit landlords from transferring improvements costs to the tenant
- Develop specific approaches to improve health conditions of school buildings and improve weatherization and energy performance

## INFRASTRUCTURE

- Improve on-site storm water management practices
- Identify assets and systems in flood risk areas
- Update aging stormwater infrastructure to include long-term anticipation of increased precipitation and stormwater

## NATURAL ENVIRONMENT

- Increase public ecosystem, recreation area restoration, and conservation abilities particularly for natural water resources and watersheds including economic benefits

## EQUITY

- Provide resources for local organizations already providing services to vulnerable populations
- Increase funding goals for programs targeting low wealth and other socially vulnerable communities
- Evaluate existing policies that are burdensome for low wealth and/or transportation-challenged communities
- Create alternate measures for compliance measures for policies that are overly burdensome

## STRATEGIC POLICY STRATEGIES

- Include neighborhood and/or community leaders in strategic planning meetings

## PROPERTY/SITE STRATEGIES

- Reduce hard pavement and other solid surface areas
- Replace/service roofs, windows/doors; improve insulation and air sealing
- Replace/service appliances and HVAC systems
- Install new energy efficient equipment like smart thermostats, energy efficient lighting and HVAC systems, passive heating, waste heat recovery
- Weatherize homes and buildings to protect from elements
- Replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling

**PROPERTY/SITE STRATEGIES**

Develop guidance for residential property owners to use in determining renewable energy options

Install solar power sources

Require electric, on-site renewable energy, and minimum standards in new construction

Increase electric, on-site renewable energy, and minimum standards in existing buildings

Improve access for low to moderate wealth families in existing programs

Promote financial benefits of energy management with social media campaigns

Increase capacity to enforce the most current building code

Plant trees and native plants

**FUEL SOURCE STRATEGIES**

Increase compliance requirements

**PUBLIC HEALTH**

Protect urban gardens and greenspace from development

Coordinate with neighborhood and/or community organizations to distribute what is needed

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Prioritize alternate energy sources for those dependent on electric power for health needs
- Centralize compliance and maintenance
- Connect with local agencies to identify vulnerable energy resources
- Promote place based approach: empower community based organizations to connect with residents and invite their participation when ideas/plans are being discussed with agencies (see *Eastwick: From Recovery to Resilience* at [www.phila.gov](http://www.phila.gov))
- Build community based organization capacity for long-term sustainability for effective participation
- Provide tree planting resources, education about dangerous chemicals, community gardens
- Encourage ‘Keep (town name) beautiful’ programs; reduce barriers between types of public properties

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Vote and participate in local committees and government meetings
- Invest in community education to empower participation
- Increase capacity of community organizations
- Give value to local organizations and recognize as source of power
- Prioritize basic needs within climate change planning initiatives
- Address the challenges for EJ communities to participate
- Recognize broad definition of communities
- Reduce engagement burden, refrain from asking the same questions of the same groups by multiple entities
- Provide participating groups with resources and benefits to participate
- Apply enforcement and performance expectations to industry

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Ensure infrastructure is sound and taking responsibility
- Accept moral responsibility for providing increased health and welfare of area communities on a fundamental level
- Accept constitutional responsibility to comply with laws of clean air and clean water
- Increase enforcement and accountability of water company
- Ensure that accountability and transparency are not mutually exclusive
- Prohibit personal harm
- Recognize democracy has to build structures to manage industry for the common good
- Establish requirements for industry’s participation within the community
- Require that community feedback will be taken into account and use community benefit agreements

- Balance salaries for upper level management with the employees
- Relate the fines to the order of magnitude of the problem created

## WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?

- Correlate fines with the level of damage
- Develop overriding value systems to address mission conflicts across agencies
- Fund the agencies to perform their assigned responsibilities
- Reduce barriers to enrollment in weatherization programs as an answer to underenrollment
- Apply Philadelphia's Built to Last program (<https://philaenergy.org/programs-initiatives/built-to-last/>)
- Prioritize property improvements to needs which will need to broaden weatherization program definitions and scope
- Increase access for direct communication with the representatives managing the programs
- Reduce the network of communication barriers with technology
- Increase cooperation across state agencies, remove silos to solve intersectional issues
- Develop alternate application requirements beyond web-based systems
- Create an ombudsman program to support public and community efforts (see Philadelphia 3-1-1 for non-emergencies [www.phila.gov](http://www.phila.gov))
- Keep up with current best practices already established
- Empower agencies to adequately address these issues such as legislation to increase bond requirements, participate in federal funding programs to mitigate acid mine drainage, orphaned, and abandoned wells
- Prioritize improvements and legislation for school greening

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Work with faith based leaders and other community leaders in the community but must resource those groups for them to have capacity
- Invite state legislators to meetings



Area flooding captured by Yale Climate Connections

## OTHER STRATEGIES RECOMMENDED

Implement recommendations of previously completed plans and identify reasons for action/inaction

Provide waste management education including benefits incinerators and landfills

Increase inter-agency cooperation between state and local governments with respect to plastic bag bans and vulnerable energy sources

Publish and promote educational materials about individual actions

Prioritize workforce strategies to address fair labor, energy, housing, salaries, and affordability challenges

Focus on systemic solutions

Regulate landlord/tenant performance requirements

Prioritize energy improvements for those dependent on electricity for health issues

Modify grant programs to fund necessary weatherization in anticipation of energy upgrades

Consolidate state agency communications with Environmental Justice communities to minimize engagement burden and maximize participation

Prioritize business and industry compliance before individual compliance commensurate with moral and constitutional responsibilities

Require fuel industries to contribute transparent stewardship to environment and communities

Develop citizen empowerment programs

Impose impact fees for and public evaluation of polluters; fines in order of magnitude

Require accountability for all programs and agencies

Create ombudsman program





Attendees shared personal experiences and the efforts of their organizations.

## PRIORITIES CONTINUED

- Food issues must be included as ways to use food resources to solve other issues
- Modify grant programs with inherent barriers to access which can include a narrow application window
- Automate application processes scaled for larger impacts versus individual property to avoid unnecessary repetition
- Electrify homes and businesses
- Align needs of people with solutions and access to the solutions
- Transform the energy system rather than focusing solely on solar and large-scale installations
- Environmental sustainability must be accountable for resulting gentrification and addressed in the beginning of every planning project so that residents are not unequally burdened
- Communication regarding how money is being spent and whether there are connections that ultimately expand fossil fuel entities or partners
- Mental health issues related to elderly seeking assistance outside their home, anxieties for next water crisis, fear of flooding risks, other climate change disasters
- Economic impacts of climate change costs from individual level to communities of low wealth such as food costs and other costs of living; potential to adapt or reinvest in drinking water fountain infrastructure

## WHAT ARE CHANGES MOST RELEVANT TO A TENANT, A PROPERTY OWNER?

- Organize, build a coalition to prompt change needed
- Empower people, independent action is not going to change climate resiliency, systemic issues need to be addressed; creates a distraction unless it can be done en masse
- Develop capacity building for coalitions and community organizations
- Confront perceptions that some city programs conflict or co-opt individual action (e.g. city cutting down trees while promoting tree planting)

## FUEL SOURCE STRATEGIES

Develop a model of solar field installations at a community scale including rooftop installations that include solar storage

Increase compliance requirements

Form a solar co-op in neighborhoods to reduce the cost of installing solar

Increase use of microgrids for large commercial facilities that can be used on-site and for local power distribution

## PROPERTY/SITE STRATEGIES

Develop a network to connect contractors with needs of tenants and property owners

Develop training and educational assistance programs to increase trade professionals

Weatherize homes and buildings to protect from elements particularly for tenants

Replace gas/oil sourced energy and use electricity and heat pumps for heating and cooling

Increase electric standards in existing buildings

Reduce hard pavement and other solid surface areas

Plant trees and native plants

Strengthen policies to limit stormwater runoff outside of property

## TRANSPORTATION STRATEGIES

Ensure emergency public transit schedules are available and broadly communicated

## STRATEGIC POLICY STRATEGIES

Include neighborhood and/or community leaders in strategic planning meetings

Eliminate barriers to urban gardening and farming with access to funding

Transition vacant lands including community priorities

Increase requirements to fund or build affordable housing, schools, healthcare facilities, and transportation systems with new development

**OTHER STRATEGIES RECOMMENDED**

Provide deliverable or other tangible result of materials produced from any community participation event

Identify compliance and infrastructure investments for school facilities confronting public health crises

Unify communications across agencies with focus on emergency coordination

Identify food resource strategies

Modify grant programs to remove limited application window, increase enrollment, ease accessibility, improve management, prioritize multi-community benefit projects, ease hard cash match requirements

Evaluate project development and implementation that mitigates gentrification

Evaluate potential for unintended consequences

Require public reporting and broadly accessible information about state spending on federal improvement programs

Develop communication toolkits to empower existing organizations

Focus on systemic solutions

Require accountability for all programs and state and local agencies including financial supporters

Create block captain program as a compensated community benefit

Adopt zoning incentives for shade trees and structures

Evaluate overhaul of waste management

Adopt a wealth tax

Provide equity benchmarking in all areas and programs

Prioritize business and industry compliance before individual compliance

Remove legislative barriers at the state level to improve municipal access and implementation

**HOW CAN CONDITIONS BE IMPROVED ON YOUR BLOCK?**

- Provide access to money for gardens/tree plantings across communities equally
- Bring more shade to blocks
- Look at zoning codes to promote tall structures creating shade; seasonal improvements
- Fund block captains to remove burden from “volunteers,” fund mutual support networks to increase effectiveness

**WHAT CAN THE COMMUNITY DO TO IMPROVE THE CIRCUMSTANCES?**

- Evaluate how space is used in the middle of the block
- Identify property owners for adjacent areas that contribute to immediate pollution
- Share information on IRA and other funding systems and provide education and outreach to increase accessibility
- Talk about climate solutions to broaden the general understanding and relevance for average community members
- Provide a clearing house of funding opportunities and a simplified application process
- Require action and accountability for climate goals already established
- Institute a wealth tax including property investments
- Invest in equity of resources and services, parks, trash, schools
- Break contract with waste management providers
- Reduce waste in city operations to maximize function of taxpayer dollars
- Revise land uses to avoid encouraging development in the land bank process
- Encourage city officials to be more open to citizen comments, increase engagement between local government and community
- Recognize council members are connected to money from developers/ real estate; example revenue department lack of transparency and impunity
- Increase ability of community members to direct funding efforts – participatory budgeting for all areas of department

**WHAT IS THE RESPONSIBILITY OF INDUSTRY?**

- Contribute to solutions
- Require accountability and acknowledgement of responsibility
- Establish collaboration between community groups and waste management industry
- Adopt regulations that require enforcement

- Prioritize results that place people and community over profit

## WHAT IS THE RESPONSIBILITY OF STATE AGENCIES?

- Make it possible for communities to employ climate action programs including converting to renewable energy sources
- Strictly regulate areas subject to stormwater and industrial discharge permits
- Recognize city is outpacing flood rates of the state's projection and there is no soil or water agency to regulate capacity at the local level
- Provide transparency including access for public to engage in meaningful way such as interviewer compensation
- Incentivize community ownership of solar; deploy micro grids and pair solar with solar storage
- Perform asset mapping and management to determine capacity and funding needs
- Provide grant access and management assistance
- Set energy policy to shape the timeline to energy transition
- Establish per capita funding basis of energy management resources to increase local program
- Improve effectiveness of legislature
- Allow the city to fund and implement its own goals
- Influence workforce policies and labor standards of green jobs and increase education about green energy jobs
- Allow local access to adjacent green energy sources
- Adopt environmental justice law
- Learn from other resources like the New Jersey Environmental Justice Plan ([www.dep.nj.gov](http://www.dep.nj.gov))
- Frame expectations for individual participation with what is feasible and accessible to them

## WHAT NEEDS TO BE PROVIDED FOR YOUR CONSTITUENCY TO HAVE A VOICE IN THIS CONVERSATION?

- Contact local communities and engage with trusted members to help influence participation within their community to engage in asset mapping
- Provide more opportunities through automation to share grant opportunities
- Show up in local communities and work with organizations that are already invested
- Use the languages inherent in a community to share information
- Provide greater clarity of why engagement will be valuable, how it will be used, and/or use compensation

## OTHER STRATEGIES CONTINUED

Build relationships with local communities through intentional and meaningful practice of engagement including compensation

Create soil and/or water management agency

Deploy Asset Mapping

Develop energy policies with a coordinated timeline

Adopt Environmental Justice Law

Prioritize workforce benefits and green industry



*Stormwater can be absorbed and slowed by using garden beds in place of paved surfaces. (Philadelphia Water Department)*



Preservation Design Partnership, LLC  
Philadelphia, Pennsylvania  
[www.pdparchitects.com](http://www.pdparchitects.com)